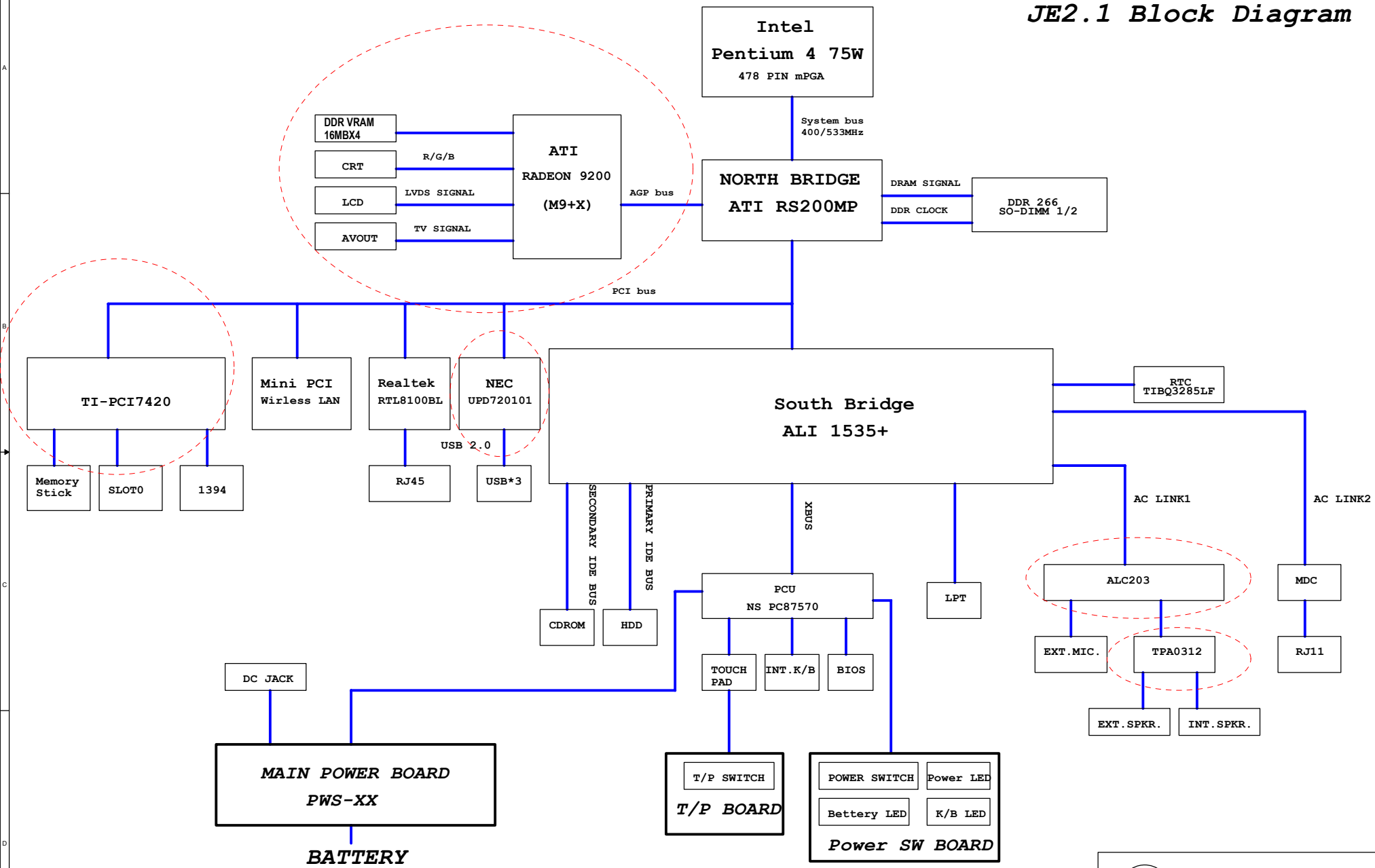
JE2.1 Block Diagram



QUANTA COMPUTER

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02 Page List
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04 Northwood CPU-2
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07 RS200M-PCI & AGP I/F
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09 SYSTEM CONFIGURATION
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15 USB2.0 Controller (NEC-uPD720101)

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17 ATI M9+ 2/3
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19 VGA DDR VRAMX2 1/2
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21 AGP SSC/FAN3
22 TI7420-A (CARDBUS+1394+MS)
23 TI7420-B (CARDBUS+1394+MS)
24 Cardbus slot
25 LAN interface RTL8100B

26 Audio CODEC
27 Audio AMP & Int. Speaker
28 MiniPCI & MDC
29 RTC/POWER GOOD LOGIC
30 IDE/HDD/LPT Connector

31 PCU NS 87570
32 Int. Keyboard/Bios/FAN
33 VCORE POWER 1
34 MAX1546(VCORE POWER 2)
35 MAX1632(5V/3V/12V)

36 MAX1844(2.5V/1.8V/1.25V)
37 MAX1844(VCC1.5)
38 Load Switch

QUANTA COMPUTER

Title: COVER PAGE

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U1A
ZIF_SOCKET479

(5) HA[3..31]
(5) HD[0..63]
(5) -HDBI[0..3]

HA3 K2 A#3
HA4 K4 A#4
HA5 L6 A#5
HA6 K1 A#6
HA7 L3 A#7
HA8 M6 A#8
HA9 L2 A#9
HA10 M3 A#10
HA11 M4 A#11
HA12 N1 A#12
HA13 M1 A#13
HA14 N2 A#14
HA15 N4 A#15
HA16 N5 A#16
HA17 T1 A#17
HA18 R2 A#18
HA19 P3 A#19
HA20 P4 A#20
HA21 R3 A#21
HA22 T2 A#22
HA23 U1 A#23
HA24 P6 A#24
HA25 U3 A#25
HA26 T4 A#26
HA27 V2 A#27
HA28 R6 A#28
HA29 W1 A#29
HA30 T5 A#30
HA31 U4 A#31
T57 V3 A#32
T58 W2 A#33
T60 Y1 A#34
T62 AB1 A#35

HD0 B21 D#0
HD1 B22 D#1
HD2 A23 D#2
HD3 A25 D#3
HD4 C21 D#4
HD5 D22 D#5
HD6 B24 D#6
HD7 C23 D#7
HD8 C24 D#8
HD9 B25 D#9
HD10 G22 D#10
HD11 H21 D#11
HD12 C26 D#12
HD13 D23 D#13
HD14 J21 D#14
HD15 D25 D#15
HD16 H22 D#16
HD17 E24 D#17
HD18 G23 D#18
HD19 F23 D#19
HD20 F24 D#20
HD21 E25 D#21
HD22 F26 D#22
HD23 D26 D#23
HD24 L21 D#24
HD25 G26 D#25
HD26 H24 D#26
HD27 M21 D#27
HD28 L22 D#28
HD29 J24 D#29
HD30 K23 D#30
HD31 H25 D#31
HD32 M23 D#32
HD33 N22 D#33
HD34 P21 D#34
HD35 M24 D#35
HD36 N23 D#36
HD37 M26 D#37
HD38 N26 D#38
HD39 N25 D#39
HD40 R21 D#40
HD41 P24 D#41
HD42 R25 D#42
HD43 R24 D#43
HD44 T26 D#44
HD45 T25 D#45
HD46 T22 D#46
HD47 T23 D#47
HD48 U26 D#48
HD49 U24 D#49
HD50 U23 D#50
HD51 V25 D#51
HD52 U21 D#52
HD53 V22 D#53
HD54 V24 D#54
HD55 W26 D#55
HD56 Y26 D#56
HD57 W25 D#57
HD58 Y23 D#58
HD59 Y24 D#59
HD60 Y21 D#60
HD61 AA25 D#61
HD62 AA22 D#62
HD63 AA24 D#63

-HDBI0 F21 DBI0
-HDBI1 G25 DBI1
-HDBI2 P26 DBI2
-HDBI3 V21 DBI3

A20M C6 -HA20M
FERR B6 -HFERR
INIT W5 -HCPUINIT
LINT0 D1 INTR (13)
LINT1 E5 NMI (13)
IGNNE B2 -IGNNE (13)
SMI B5 -SMI (14)
SLP AB26 -SLP (14)
STPCLK Y4 -STPCLK (14)

ADS G1 -HADS (5)
ADSTB0 L5 -HA_STB0 (5)
ADSTB1 R5 -HA_STB1 (5)
BNR G2 -HBNR (5)
DBSY H5 -HDBSY (5)
DEFER E2 -HDEFER (5)
DRDY H2 -HDRDY (5)
HIT F3 -HHIT (5)
HITM E3 -HHITM (5)
TRDY J6 -HTRDY (5)
BPRI D2 -HBPRI (5)
BR0 H6 -HBREQ0 (5)
LOCK G4 -HLOCK (5)

REQ0 J1 -HREQ0 (5)
REQ1 K5 -HREQ1 (5)
REQ2 J4 -HREQ2 (5)
REQ3 J3 -HREQ3 (5)
REQ4 H3 -HREQ4 (5)

RS0 F1 -HRS0 (5)
RS1 G5 -HRS1 (5)
RS2 F4 -HRS2 (5)

DSTBP0 F21 -HD_STBP0 (5)
DSTBN0 E22 -HD_STBN0 (5)
DSTBP1 J23 -HD_STBP1 (5)
DSTBN1 K22 -HD_STBN1 (5)
DSTBP2 P23 -HD_STBP2 (5)
DSTBN2 R22 -HD_STBN2 (5)
DSTBP3 W23 -HD_STBP3 (5)
DSTBN3 W22 -HD_STBN3 (5)

BCLK0 AF22 CPUCLK+ CPUCLK+ (8)
BCLK1 AF23 CPUCLK- CPUCLK- (8)

ITP_CLK1 AD26 ITP_CLK-
ITP_CLK0 AC26 ITP_CLK+

IERR AC3 -IERR
MCERR V6 T96

DBRESET AE25 DBRESET

RESET AB25 -CPURST -CPURST (5)

PWRGOOD AB23 PWRGD_CPU PWRGD_CPU (29)

SKTOCC AF26 T108

COMP0 L24 CPU_COMP0
COMP1 P1 CPU_COMP1

DEP0 J26 T117
DEP1 K25 T119
DEP2 K26 T121
DEP3 L25 T123

THERMDA B3 THERMDA THERMDA (4)
THERMDC C4 THERMDC THERMDC (4)
THERMTRIP A2 -TRIP
PROCHOT C3 -PROCHOT

TESTHI0 AD24 HTEST0
TESTHI1 AA2 HTEST1
TESTHI2 AC21 HTEST2
TESTHI3 AC20 HTEST3
TESTHI4 AC24 HTEST4
TESTHI5 AC23 HTEST5
TESTHI6 AA20 ITPCLK0
TESTHI7 AB22 ITPCLK1
TESTHI8 U6 HTEST8
TESTHI9 W4 HTEST9
TESTHI10 Y3 HTEST10
TESTHI11 A6 -GHI -GHI (14)
TESTHI12 AD25 -DPSLP T158

BSEL0 AD6 BS0 (9)
BSEL1 AD5 BS1 (9)

TCK D4 TCK
TDI C1 TDI
TDO D5 TDO
TMS F7 TMS
TRST E6 -TRST

VID0 AE5 P_VID0 P_VID0 (34)
VID1 AE4 P_VID1 P_VID1 (34)
VID2 AE3 P_VID2 P_VID2 (34)
VID3 AE2 P_VID3 P_VID3 (34)
VID4 AE1 P_VID4 P_VID4 (34)
VID5 AD3 P_VID5 P_VID5 (34)

P_VID0 T174
P_VID1 T176
P_VID2 T178
P_VID3 T180
P_VID4 T181
P_VID5 T373

-GHI T156

C1 0.1U
U2 *TC7SH08FU
D1 *RB500
R4 0
-HA20M
-A20M (13)
KGA20 (31)

C6 4.7U/10V/Y5V
C7 0.1U
R15 1K
U3 TC7SH08FU
D2 RB500
R18 *0
-HCPUINIT
-CPUINIT (13)
-RC (31)

CLOSE TO CPU

-SMI R1 200
-STPCLK R2 200
-SLP R3 200
PWRGD_CPU R5 200
-IERR R6 1K
-TRIP R7 56_1%
-HBREQ0 R8 51.1_1%
-CPURST R9 51.1_1%
ITP_CLK+ R10 1K
ITP_CLK- R12 1K
TDI R13 150
DBRESET R14 150
-PROCHOT R16 56_1%
-HFERR R17 56_1%
TDO R430 75_1%
TMS R431 39
TCK R432 27
-TRST R433 680
(31) -PROCHOT

VCORE

RP1 1Kx4
HTEST1 HTEST9 HTEST10
RP2 200x4
-HA20M NMI -IGNNE INTR
RP3 1Kx4
HTEST8 HTEST3 HTEST2
RP4 1Kx4
HTEST4 HTEST5 HTEST0
C2 C3 C4 C5 0.1U

-HCPUINIT R499 1K
ITPCLK1 R500 1K
ITPCLK0 R501 1K

CPUCLK+ R19 33_1%
CPUCLK- R20 33_1%
Close to CPU

C8 *18P

CPU_COMP0 R21 51.1_1%
CPU_COMP1 R22 51.1_1%
Close to CPU

C9 C12 C15 C18 C21 C24 C27 C30 C33 C36 0.1U
C41 330U/2V
C10 C13 C16 C19 C22 C25 C28 C31 C34 C37 C39 C42 C44 C46 C48 C50 C52 C54 C56 C58 10U/6.3V
C11 C14 C17 C20 C23 C26 C29 C32 C35 C38 C40 C43 C45 C47 C49 C51 C53 C55 C57 C59 10U/6.3V

Q1 MMBT3904
R23 1K
R24 1K
-HFERR
-FERR (13)

R26 1K
R25 47K
Q2 MMBT3904
-DPSLP
-CPUSTOP (8,14,34)

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: CPU Socket -1/2- Signal
Size: B
Document Number: JE2.1 Main Board
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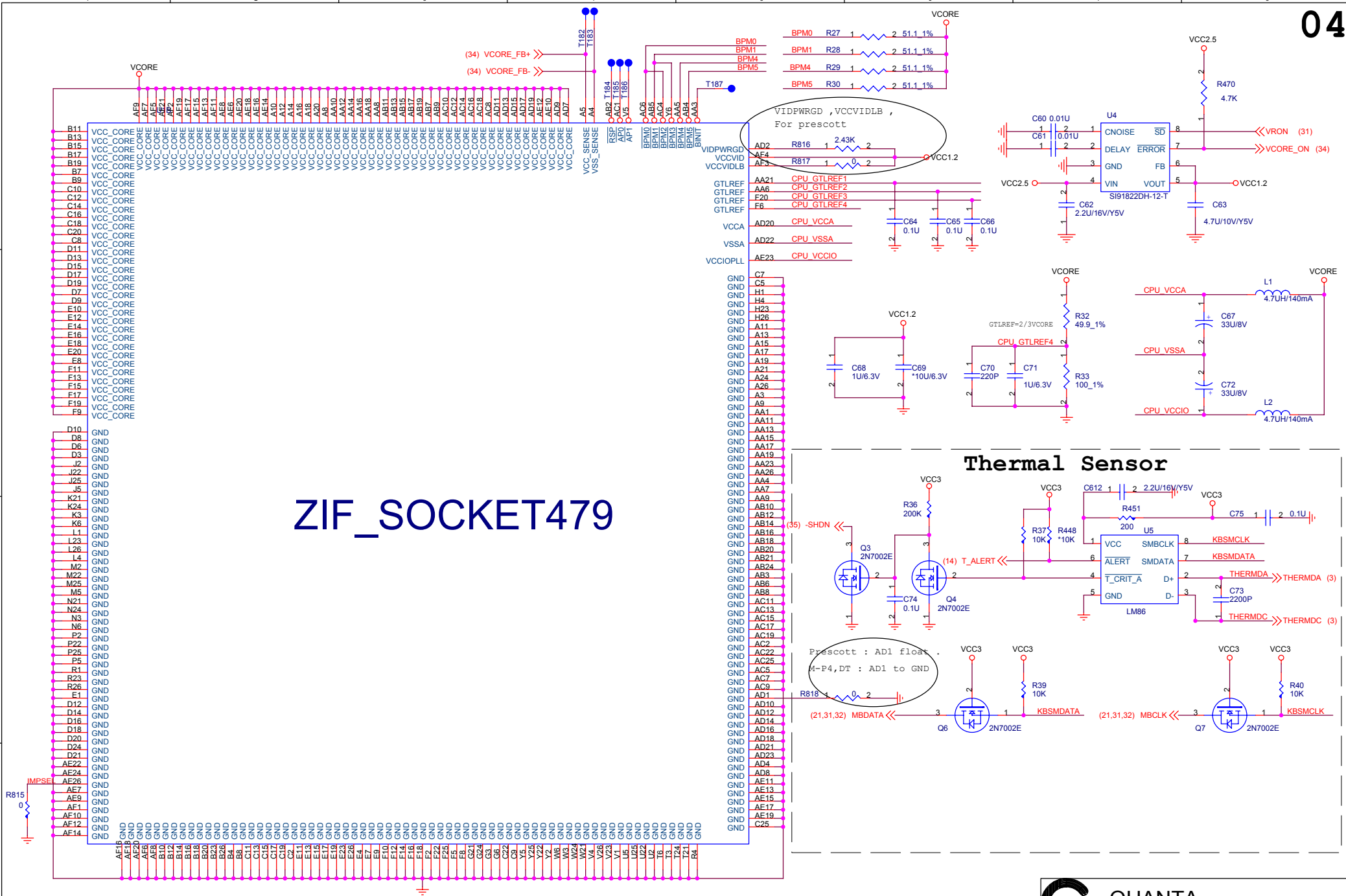

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: CPU Socket -2/2- Power & Ground

Size: B | Document Number: JE2.1 Main Board | Rev: 1A

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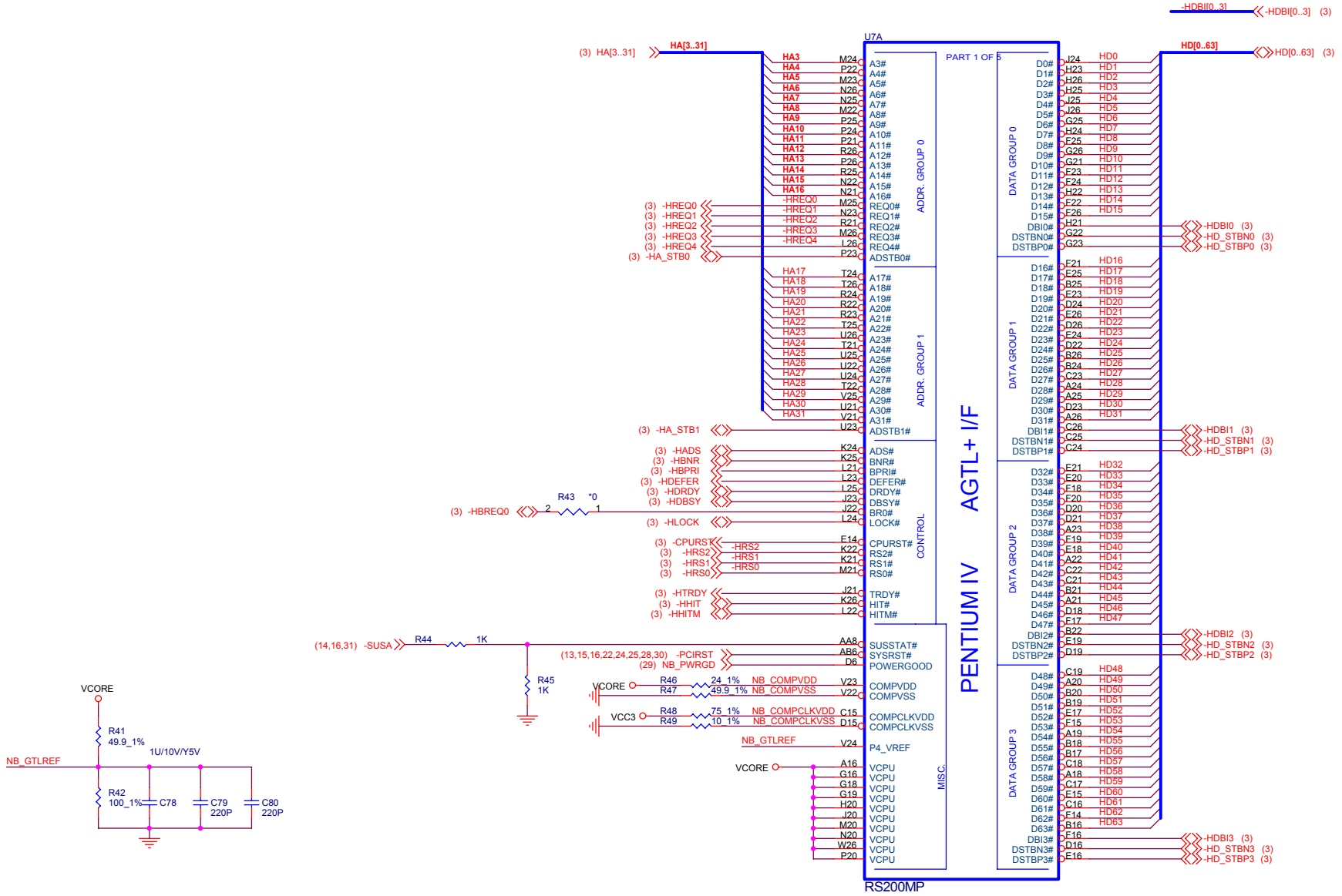

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title	RS200M 1/4	
Size B	Document Number JE2.1 Main Board	Rev 1A
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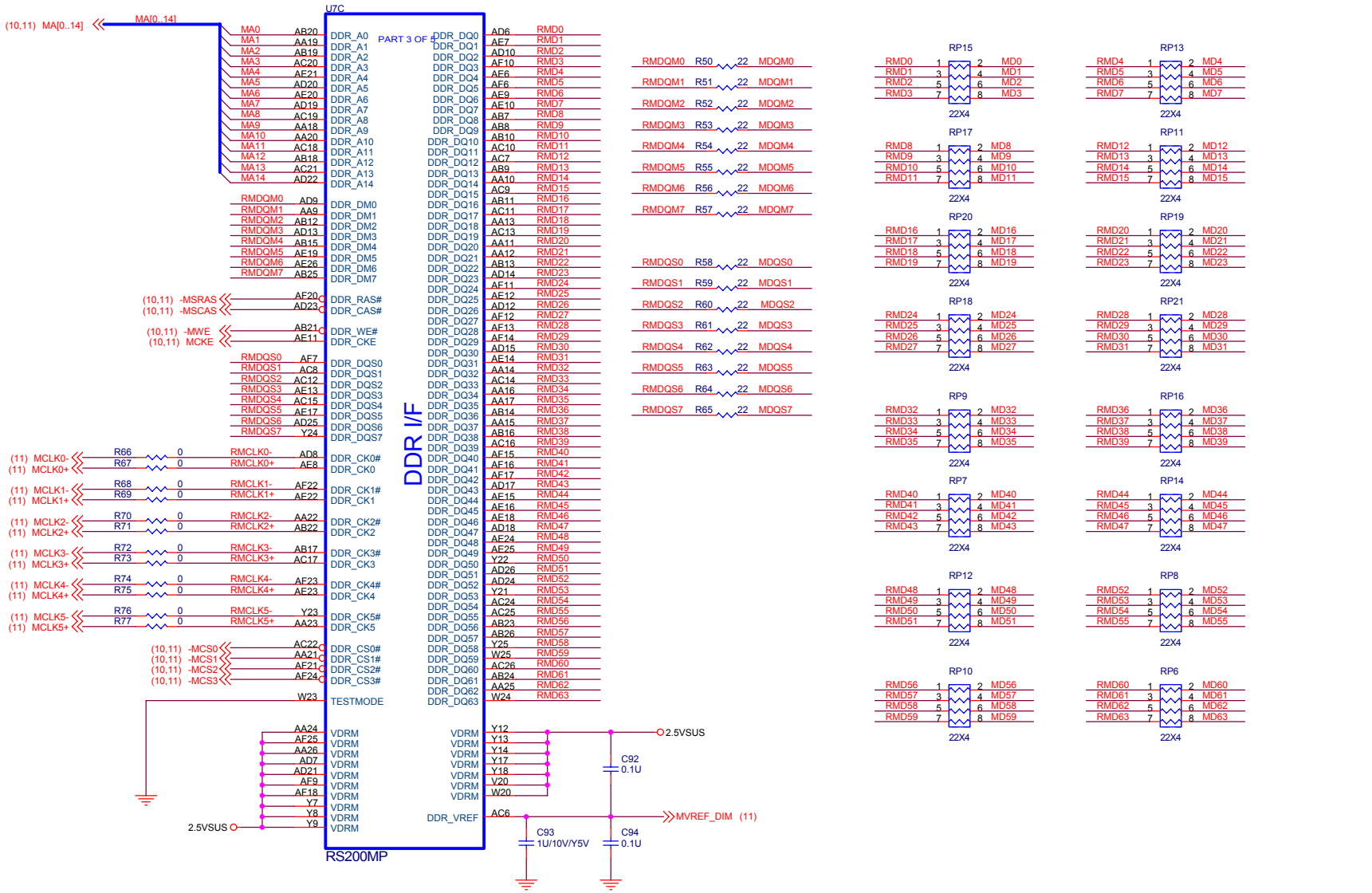
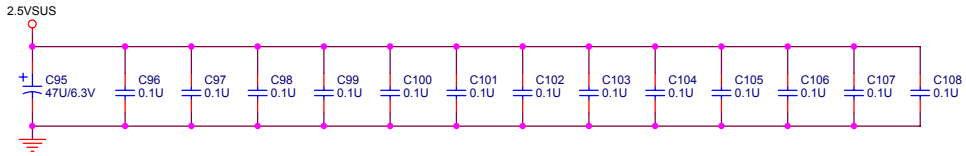
ATI_RS200M+ - 2 (DDR Interface)

MD[0..63] → MD[0..63] (10,11)
MDQM[0..7] → MDQM[0..7] (10,11)
MDQS[0..7] → MDQS[0..7] (10,11)





THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title	RS200M 2/4	
Size B	Document Number JE2.1 Main Board	Rev 1A
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-AGP_DECT	AGP	VCCAGP
1 Inter.	2X	3.3V
0 external	4X	1.5V

PUT ON THE SOLDER SIDE OF RS200M

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: RS200M 3/4

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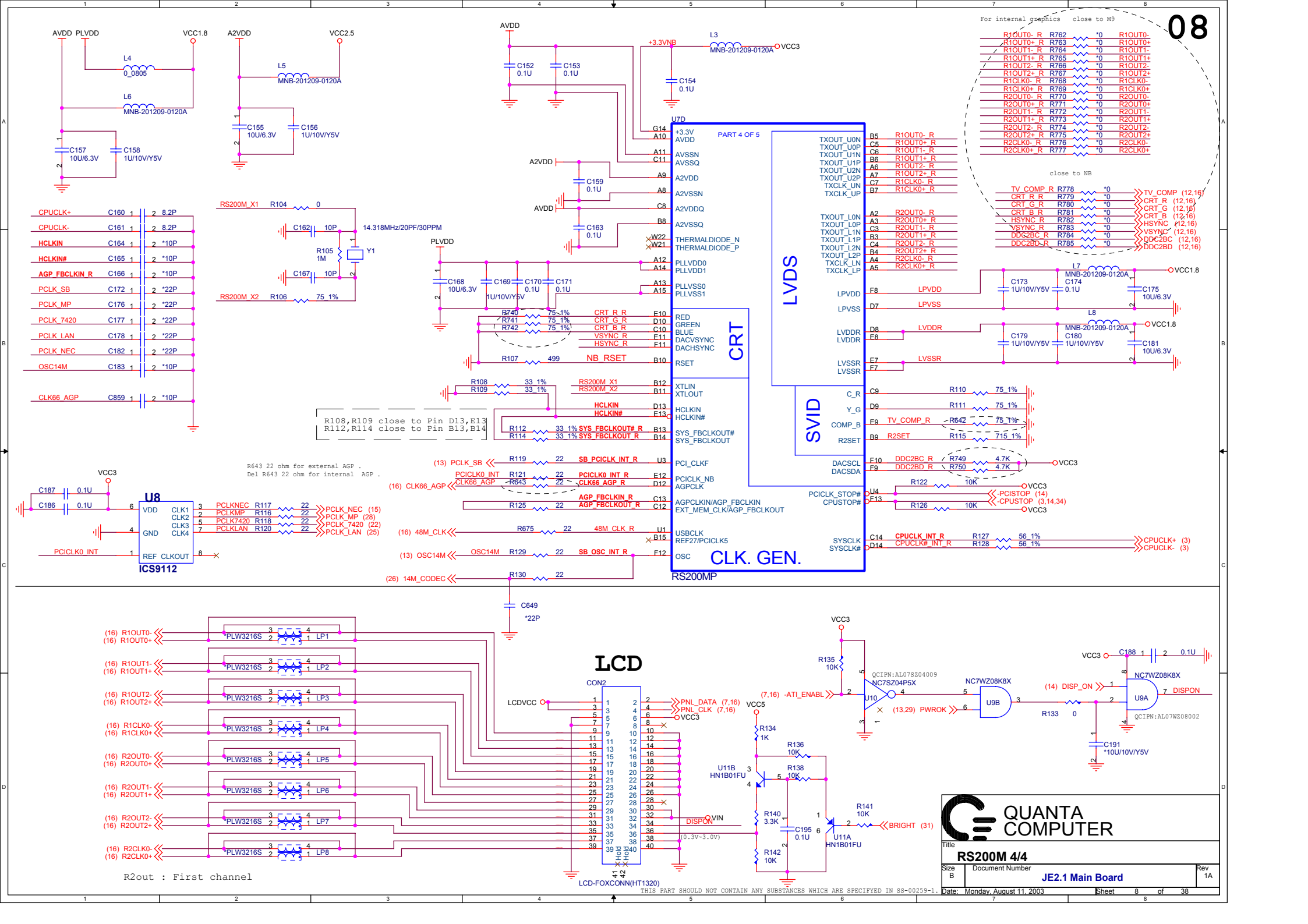
08
RS200MP
CLK. GEN.
LVDS
CRT
SVID
U7D
PART 4 OF 5
U8
ICS9112
LCD
CON2
LCD-FOXCONN(HT1320)
QUANTA COMPUTER
RS200M 4/4
JE2.1 Main Board
Monday, August 11, 2003
THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.
R2out : First channel
R108,R109 close to Pin D13,E13
R112,R114 close to Pin B13,B14
R643 22 ohm for external AGP .
Del R643 22 ohm for internal AGP .
For internal graphics close to M9
close to NB

AD[0..31]

AD[0..31] (7,13,15,22,25,28)

BS1 (3)

R144 *2.7K R145 *2.7K VCC3

AD31 R147 2.7K

BS0 (3)

R149 2.7K R150 1.5K VCC3

AD30 R152 *2.7K

AD[31..30] : CLK SPEED
DEFAULT: 01

00: 100 MHZ
01: 133 MHZ
10: 166MHZ
11: 66 MHZ

R151 2.7K VCC3

AD14 R148 *2.7K

AD14 : AGTL+ VDDQ

0: 1.2V MOBILE PART
1: 1.7V DESKTOP PART

AD12 R156 2.7K

AD[12] : FLAT PANEL ID MSB

R155 *2.7K VCC3

AD29 R157 2.7K

AD29: RS200M FULL CONFIGURATION
DEFAULT:1

0: FULL CONFIGURATION
1: USES DEFAULT VALUES

R160 2.7K VCC3

AD28 R161 *2.7K

AD28: SPREAD SPECTRUM ENABLE
DEFAULT:1

0: DISABLE
1: ENABLE

AD[7..4] : FLAT PANEL ID

AD7 R167 2.7K LCDID3
AD6 R171 2.7K LCDID2
AD5 R175 2.7K LCDID1
AD4 R178 2.7K LCDID0

VCC3

RP28 1 2 10KX4
3 4
5 6
7 8

SW1

LCDID0 1 8
LCDID1 2 7
LCDID2 3 6
LCDID3 4 5

DIP4X2

R164 *2.7K VCC3

AD27 R165 2.7K

AD27: MCERR OBSERVATION
DEFAULT: 0
0: ENABLE
1: DISABLE

R168 *2.7K VCC3

AD26 R170 2.7K

AD26: BUS PARKING
DEFAULT : 0
0: ENABLE
1: DISABLE

R172 *2.7K VCC3

AD25 R174 2.7K

AD25: BINIT# OBSERVATION
DEFAULT : 0
0: ENABLE
1: DISABLE

R177 2.7K VCC3

AD24 R179 *2.7K

AD24: IOQ ENABLE
DEFAULT : 1
0: SET IOQ TO 1
1:SET IOQ TO 12

AD3 R181 2.7K

AD3: A_LINK ENABLE
DEFAULT: 0
0:PCI- 33MHz,MULTI POINT CONNECTION
1: A_LINK,POINT TO POINT INTERCONNECT

R183 *2.7K VCC3

AD2 R184 2.7K

AD2: AUTO CALIBATION ENABLE
DEFAULT:0
0: AUTO CALIBRATION ENABLE
1: AUTO CALIBRATION DISABLE

R187 *2.7K VCC3

AD1 R188 2.7K

AD1: FrcShortReset
DEFAULT: 0
0: NORMAL OPERATION
1: TEST MODE

R185 *2.7K

AD22 R186 2.7K VCC3

AD22:REF27 ENABLE
DEFAULT : 1
0: PCICLK5 OUTPUT
1: 27 MHzREFERENCE CLOCK INPUT

R189 *2.7K VCC3

AD21 R190 2.7K

AD21 : CLK_BYPASS(TEST ONLY)
DEFAULT : 0
0: NORMAL
1: TEST MODE

AD20 R193 2.7K

AD20 : PCICLK EXPANSION
DEFAULT : 0
1: PCI_REQ#3, PCI_GNT#3 USED AS PCICLK
0: PCI_REQ#3, PCI_GNT#3 USED AS REQ/GNT

R191 2.7K VCC3

AD0 R192 *2.7K

AD0: PCI/AGP CONFIG.
DEFAULT : 1
1: EXTERTAL AGP 66 MHz
0: INTERNAL AGP 33 MHz

The AD0 signal strapping pull high for external AGP .

The AD0 signal strapping pull low for internal AGP .

PCI_PREQACT#: INTERNAL CLOCK GEN.
DEFAULT : 1

0: DISABLE
1: ENABLE

R195 2.7K VCC3

-CBE3 R196 *2.7K

R197 *2.7K VCC3

-CBE0 R198 2.7K

CBE#3: PROD TEST
DEFAULT : 1
0: SHORT TIMERS
1: NORMAL OPERATION

CBE#0:RESERVE

-CBE[0..3]

-CBE[0..3] (7,13,15,22,25,28)

(7,14) -PCIREQ R194 2.7K VCC3

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: **SYSTEM CONFIG**

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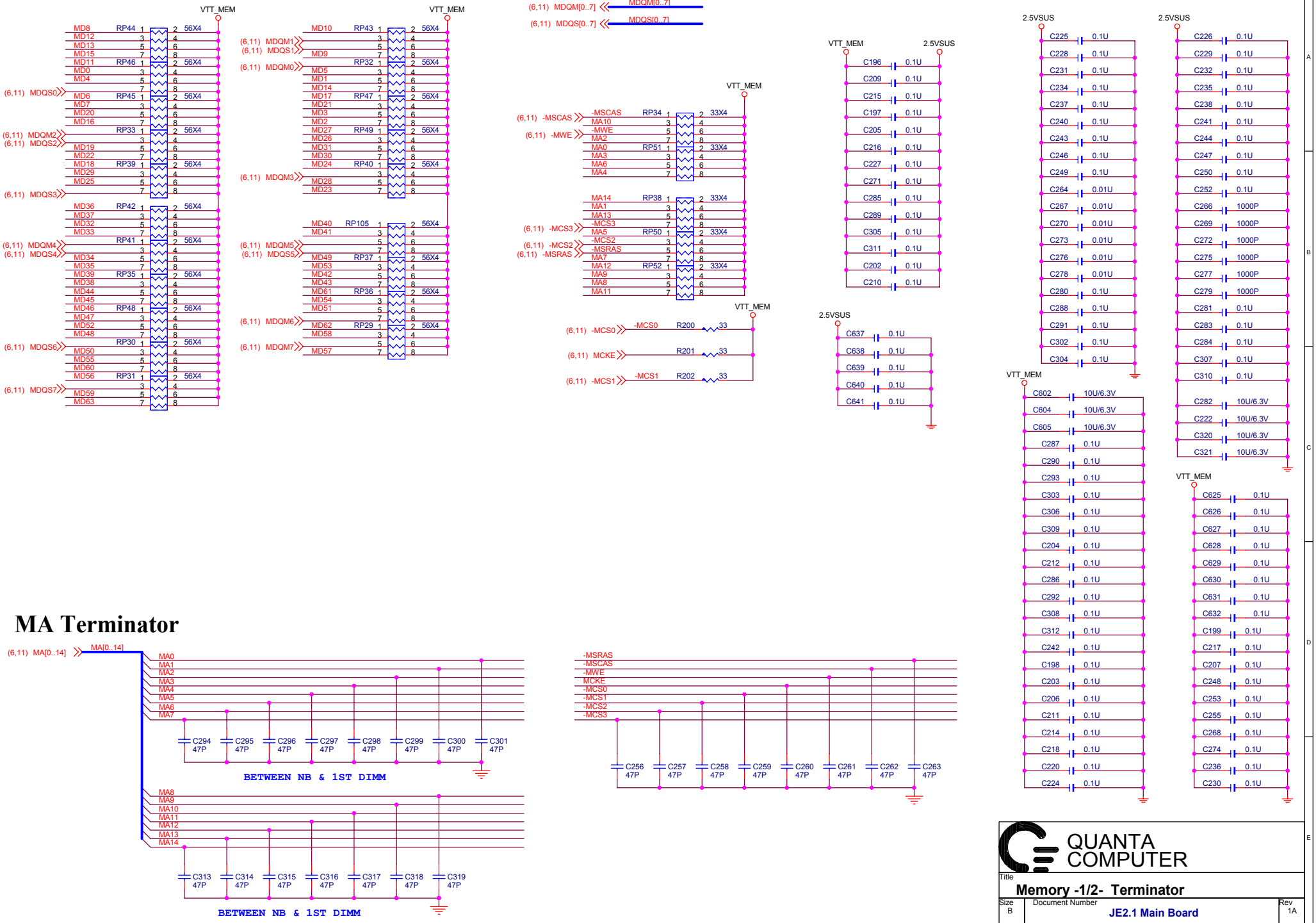
DDR TERMINATOR



MA Terminator

(6,11) MA[0..14]
MA[0..14]
MA0 MA1 MA2 MA3 MA4 MA5 MA6 MA7
C294 C295 C296 C297 C298 C299 C300 C301
47P
BETWEEN NB & 1ST DIMM
MA8 MA9 MA10 MA11 MA12 MA13 MA14
C313 C314 C315 C316 C317 C318 C319
BETWEEN NB & 1ST DIMM
-MSRAS -MSCAS -MWE MCKE -MCS0 -MCS1 -MCS2 -MCS3
C256 C257 C258 C259 C260 C261 C262 C263

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: **Memory -1/2- Terminator**

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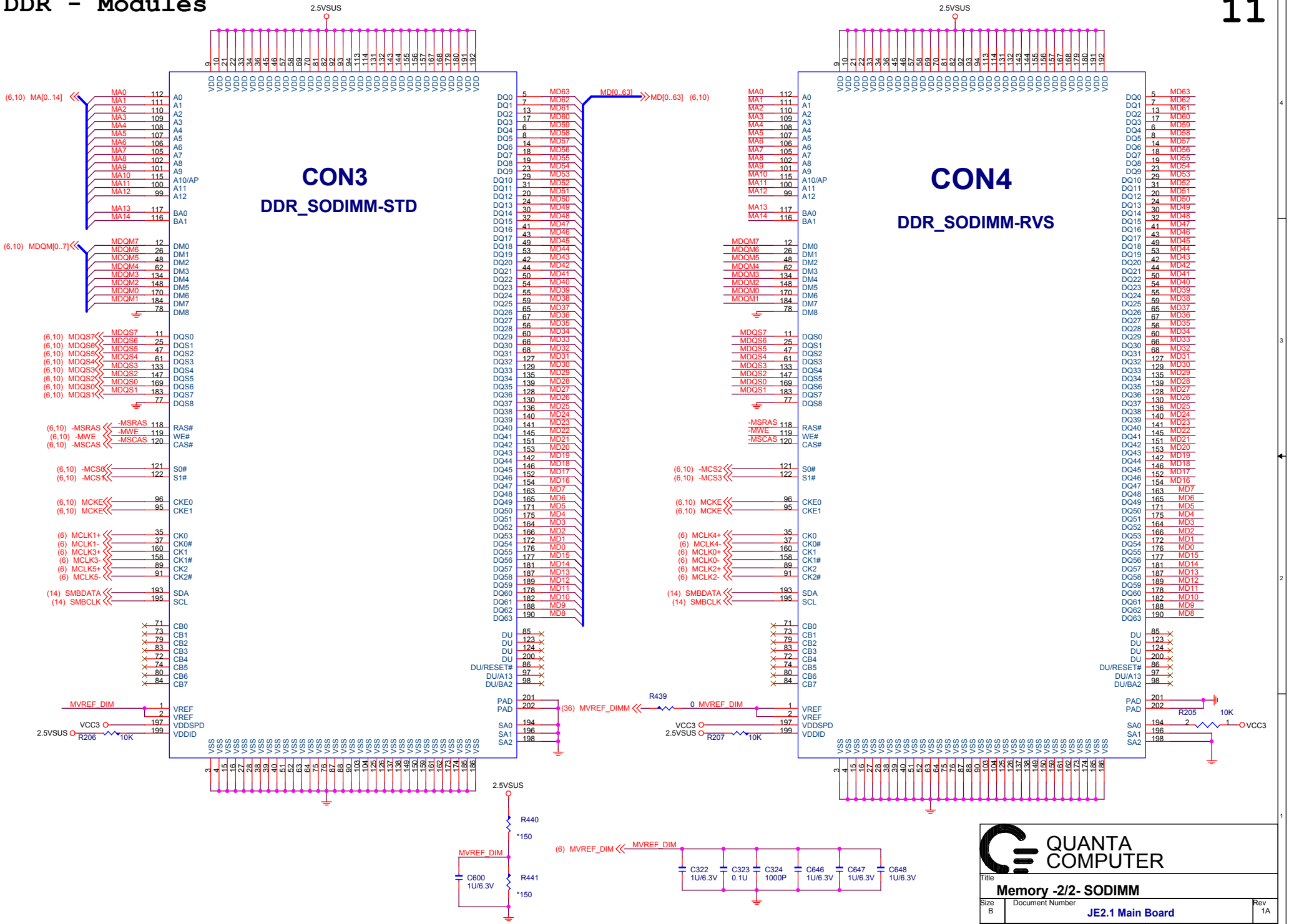
DDR - Modules



THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: **Memory -2/2- SODIMM**

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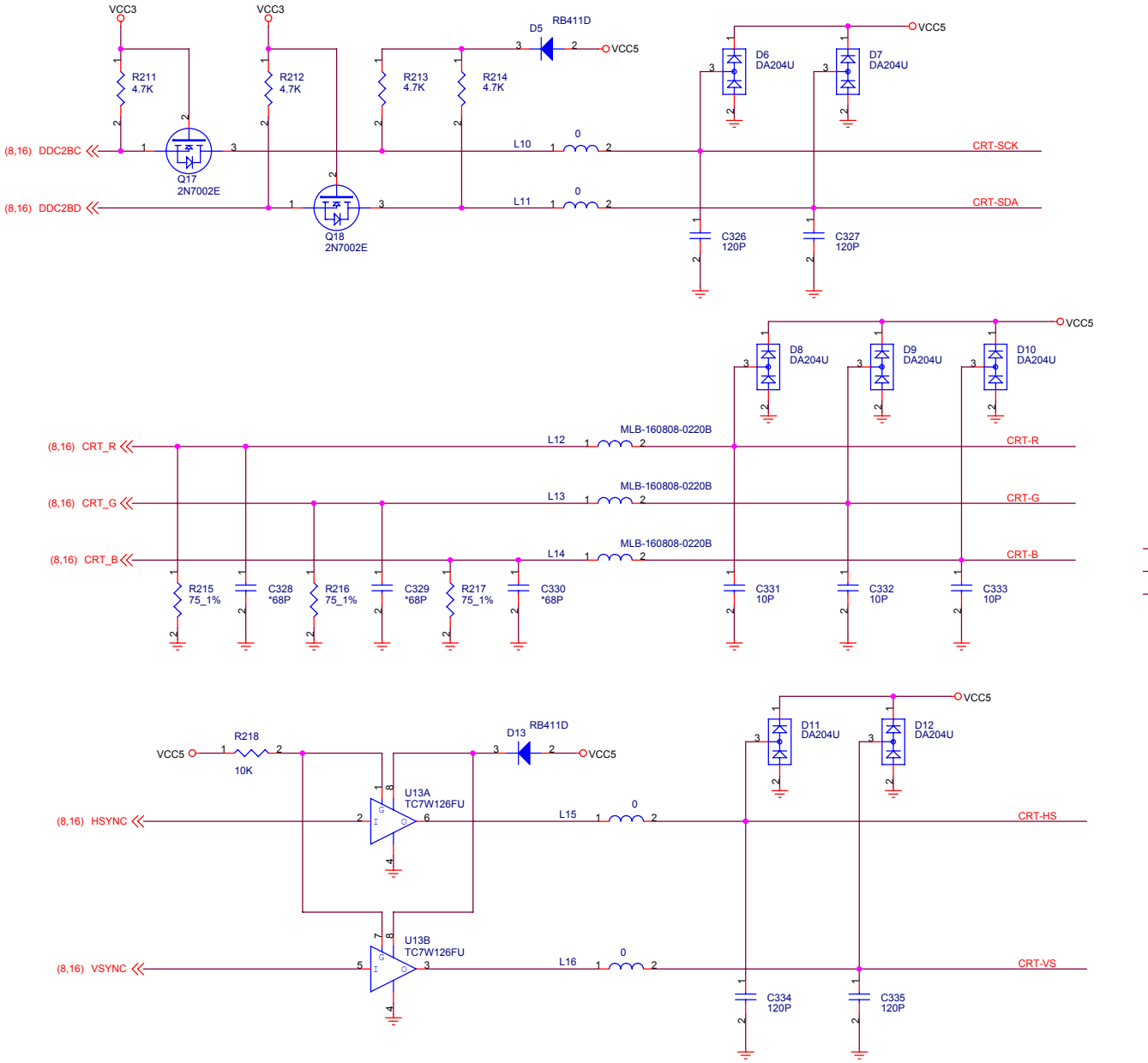

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: CRT PORT/TV

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M1535+

CPU INTERFACE

PCI BUS INTERFACE

PART 1 OF 2

PCI Configration

DEVICE	IDSEL	-GNT -REQ
uPD720101	23	1
RTL8100BL	29	2
MINI PCI	20	3
TI7420	21	0

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: 1535+ 2/2

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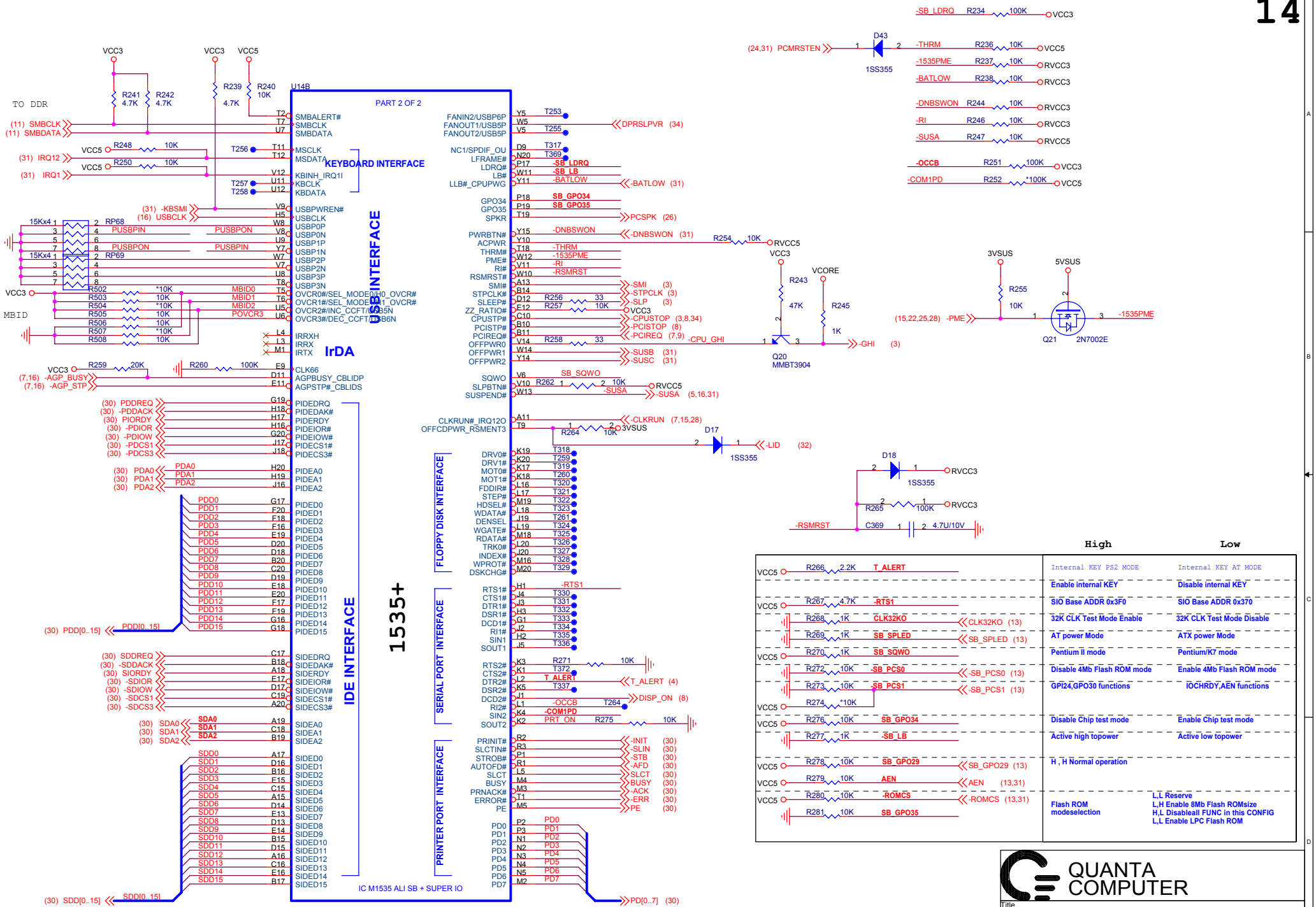
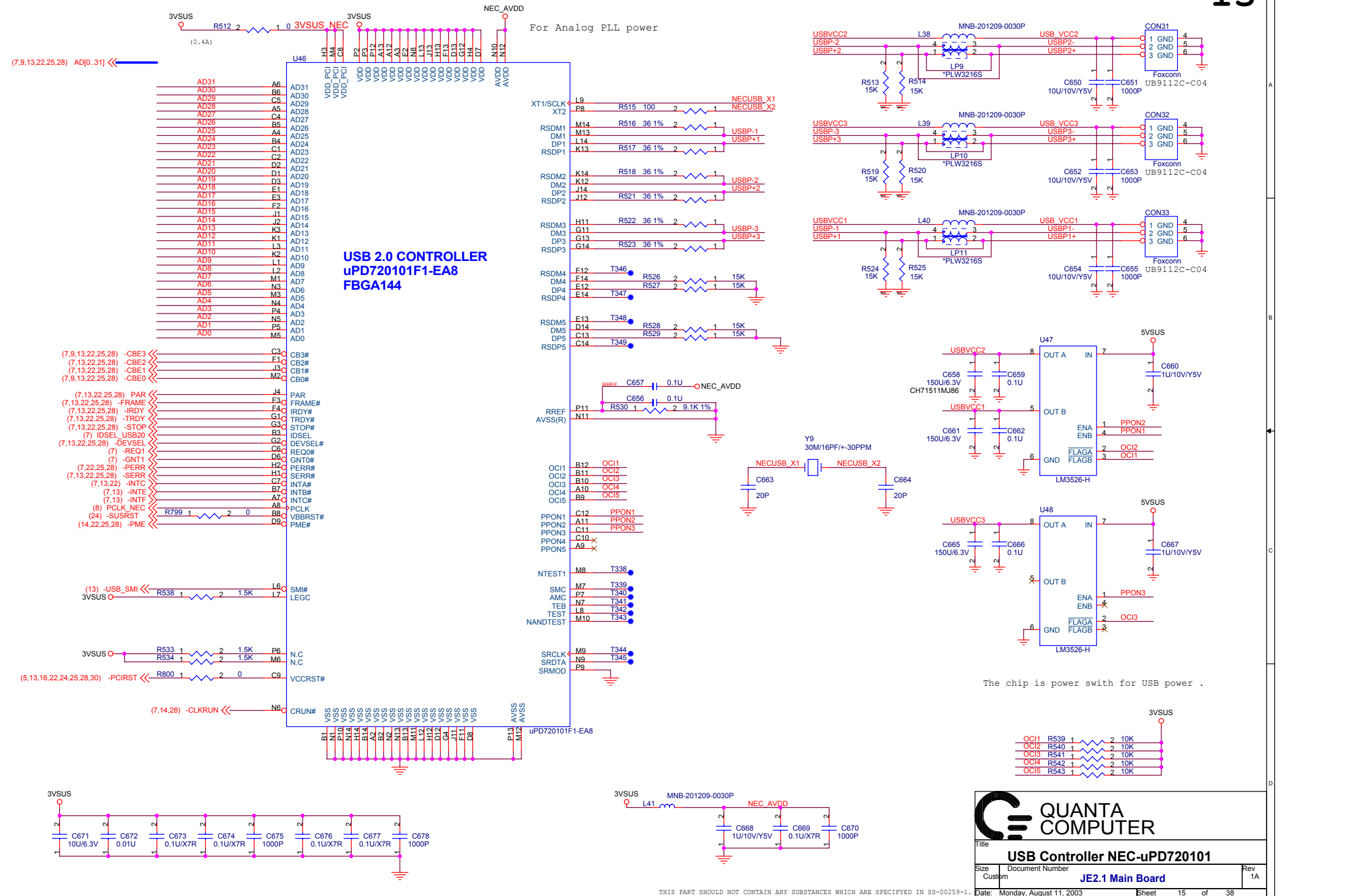

1535+
IC M1535 ALI SB + SUPER IO
PART 2 OF 2
U14B
KEYBOARD INTERFACE
USB INTERFACE
IrDA
IDE INTERFACE
FLOPPY DISK INTERFACE
SERIAL PORT INTERFACE
PRINTER PORT INTERFACE
TO DDR
MBID
SMBALERT#
SMBCLK
SMBDATA
MSCLK
MSDATA
KBINH_IRQ1I
KBCLK
KBDATA
USBPWREN#
USBCLK
USBP0P
USBP0N
USBP1P
USBP1N
USBP2P
USBP2N
USBP3P
USBP3N
IRRXH
IRRX
IRTX
CLK66
AGPBUSY_CBLIDP
AGPSTP#_CBLIDS
PIDEDRQ
PIDEDAK#
PIDERDY
PIDEIOR#
PIDEIOW#
PIDECS1#
PIDECS3#
PIDEA0
PIDEA1
PIDEA2
PIDED0
PIDED1
PIDED2
PIDED3
PIDED4
PIDED5
PIDED6
PIDED7
PIDED8
PIDED9
PIDED10
PIDED11
PIDED12
PIDED13
PIDED14
PIDED15
SIDEDRQ
SIDEDAK#
SIDERDY
SIDEIOR#
SIDEIOW#
SIDECS1#
SIDECS3#
SIDEA0
SIDEA1
SIDEA2
SIDED0
SIDED1
SIDED2
SIDED3
SIDED4
SIDED5
SIDED6
SIDED7
SIDED8
SIDED9
SIDED10
SIDED11
SIDED12
SIDED13
SIDED14
SIDED15
FANIN2/USBP6P
FANOUT1/USB5P
FANOUT2/USB5P
NC1/SPDIF_OU
LFRAME#
LDRQ#
LB#
LLB#_CPUPWG
GPO34
GPO35
SPKR
PWRBTN#
ACPWR
THRM#
PME#
RI#
RSMRST#
SMI#
STPCLK#
SLEEP#
ZZ_RATIO#
CPUSTP#
PCISTP#
PCIREQ#
OFFPWR0
OFFPWR1
OFFPWR2
SQWO
SLPBTN#
SUSPEND#
CLKRUN#_IRQ12O
OFFCDPWR_RSMENT3
DRV0#
DRV1#
MOT0#
MOT1#
FDDIR#
STEP#
HDSEL#
WDATA#
DENSEL
WGATE#
RDATA#
TRK0#
INDEX#
WPROT#
DSKCHG#
RTS1#
CTS1#
DTR1#
DSR1#
DCD1#
RI1#
SIN1
SOUT1
RTS2#
CTS2#
DTR2#
DSR2#
DCD2#
RI2#
SIN2
SOUT2
PRINIT#
SLCTIN#
STROB#
AUTOFD#
SLCT
BUSY
PRNACK#
ERROR#
PE
PD0
PD1
PD2
PD3
PD4
PD5
PD6
PD7
PD[0..7] (30)
PDD[0..15] (30)
SDD[0..15] (30)
VCC3
VCC5
R241 4.7K
R242 4.7K
R239 4.7K
R240 10K
R248 10K
R250 10K
R256 33
R257 10K
R258 33
R254 10K
R243 47K
R245 1K
R255 10K
R259 20K
R260 100K
R262 10K
R264 10K
R265 100K
R266 2.2K
R267 4.7K
R268 1K
R269 1K
R270 1K
R271 10K
R272 10K
R273 10K
R274 *10K
R275 10K
R276 10K
R277 1K
R278 10K
R279 10K
R280 10K
R281 10K
RP68 15Kx4
RP69 15Kx4
R502 *10K
R503 10K
R504 *10K
R505 10K
R506 10K
R507 *10K
R508 10K
C369 4.7U/10V
D17 1SS355
D18 1SS355
D43 1SS355
Q20 MMBT3904
Q21 2N7002E
-SB_LDRQ R234 100K
-THRM R236 10K
-1535PME R237 10K
-BATLOW R238 10K
-DNBSWON R244 10K
-RI R246 10K
-SUSA R247 10K
-OCCB R251 100K
-COM1PD R252 *100K
(24,31) PCMRSTEN
(15,22,25,28) -PME
-1535PME
3VSUS
5VSUS
VCORE
-SMI (3)
-STPCLK (3)
-SLP (3)
-CPUSTOP (3,8,34)
-PCISTOP (8)
-PCIREQ (7,9)
-CPU_GHI
-GHI (3)
-SUSB (31)
-SUSC (31)
-SUSA (5,16,31)
-CLKRUN (7,15,28)
-LID (32)
DPRSLPVR (34)
PCSPK (26)
-BATLOW (31)
-DNBSWON (31)
T_ALERT (4)
DISP_ON (8)
-INIT (30)
-SLIN (30)
-STB (30)
-AFD (30)
-ACK (30)
-ERR (30)
PE (30)
-RTS1
-SB_LB
-SB_GPO34
-SB_GPO35
-SB_SQWO
-SB_PCS0
-SB_PCS1
-SB_GPO29
-AEN
-ROMCS
-RSMRST
CLK32KO (13)
SB_SPLED (13)
AEN (13,31)
(7,16) -AGP_BUSY
(7,16) -AGP_STP
(30) PDDREQ
(30) -PDDACK
(30) PIORDY
(30) -PDIOR
(30) -PDIOW
(30) -PDCS1
(30) -PDCS3
(30) PDA0
(30) PDA1
(30) PDA2
(30) SDDREQ
(30) -SDDACK
(30) SIORDY
(30) -SDIOR
(30) -SDIOW
(30) -SDCS1
(30) -SDCS3
(30) SDA0
(30) SDA1
(30) SDA2
(11) SMBCLK
(11) SMBDATA
(31) IRQ12
(31) IRQ1
(31) -KBSMI
(16) USBCLK
MBID0
MBID1
MBID2
POVCR3
PUSBPIN
PUSBPON
-OCCB
-COM1PD
PRT_ON
T_ALERT
-RTS1
SB_GPO34
SB_GPO35
SB_SQWO
-SB_LDRQ
-SB_LB
-SB_PCS0
-SB_PCS1
-SB_GPO29
-ROMCS
SB_GPO35
-CLKRUN
-LID
-GHI
-CPU_GHI
-SUSB
-SUSC
-SUSA
-RSMRST
-1535PME
-PME
-BATLOW
-DNBSWON
-SMI
-STPCLK
-SLP
-CPUSTOP
-PCISTOP
-PCIREQ
-CPU_GHI
-SUSB
-SUSC
-SUSA
-CLKRUN
-LID
-GHI
-1535PME
-PME
-BATLOW
-DNBSWON
-SMI
-STPCLK
-SLP
-CPUSTOP
-PCISTOP
-PCIREQ
-CPU_GHI
-SUSB
-SUSC
-SUSA
-RSMRST



QUANTA COMPUTER

Title: USB Controller NEC-uPD720101

Size: Custom | Document Number: JE2.1 Main Board | Rev: 1A

Date: Monday, August 11, 2003 | Sheet 15 of 38

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

U49A

Part 1 of 6

PCI / AGP

DVO / EXT TMDS / GPIO

AGP2X

LVDS

AGP 4X

AGP 8X

TMDS

DAC2

SS

CLK

DAC1

PWR MAN

THERM

M9+X

R808 select 64MB or 32MB VRAM

R809 select SAMSUNG or Hynix VRAM

This is power switch for LCDVCC .
The chip's function is same as the original circuit and saving the space .(2.3A)

ANALOGE

The chip is CLK buffer for 48MHZ
It provide CLK to SB,MS

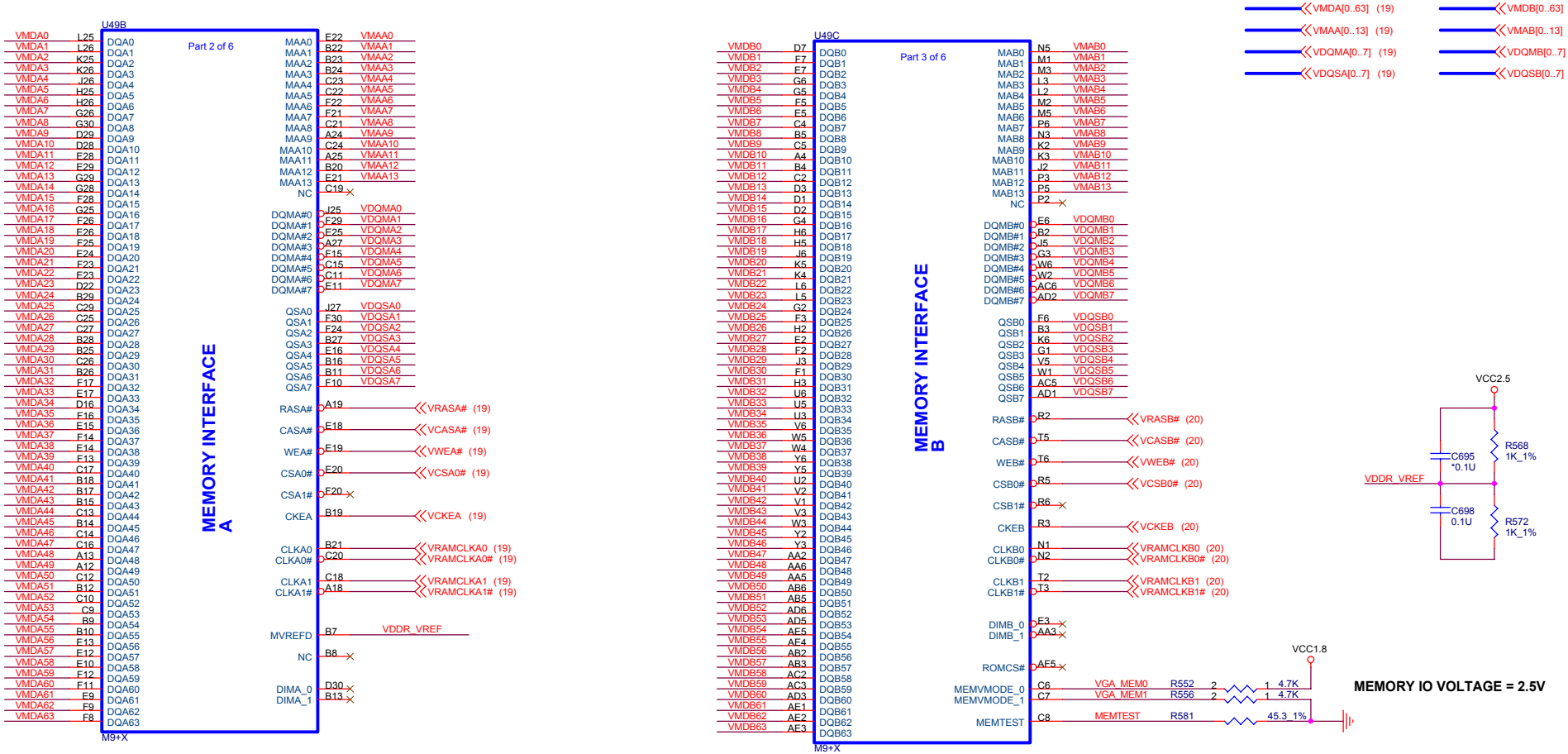
THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1

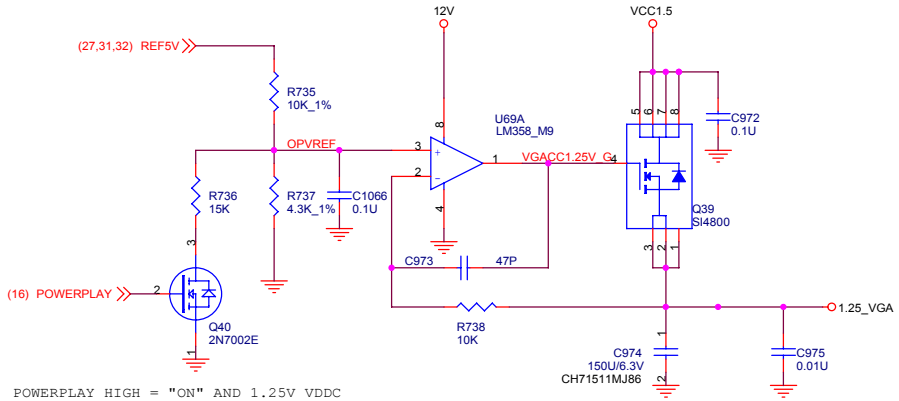
QUANTA COMPUTER

Title: ATI M9+X

Size: Custom | Document Number: JE2.1 Main Board | Rev: 1A

Date: Monday, August 11, 2003 | Sheet 16 of 38





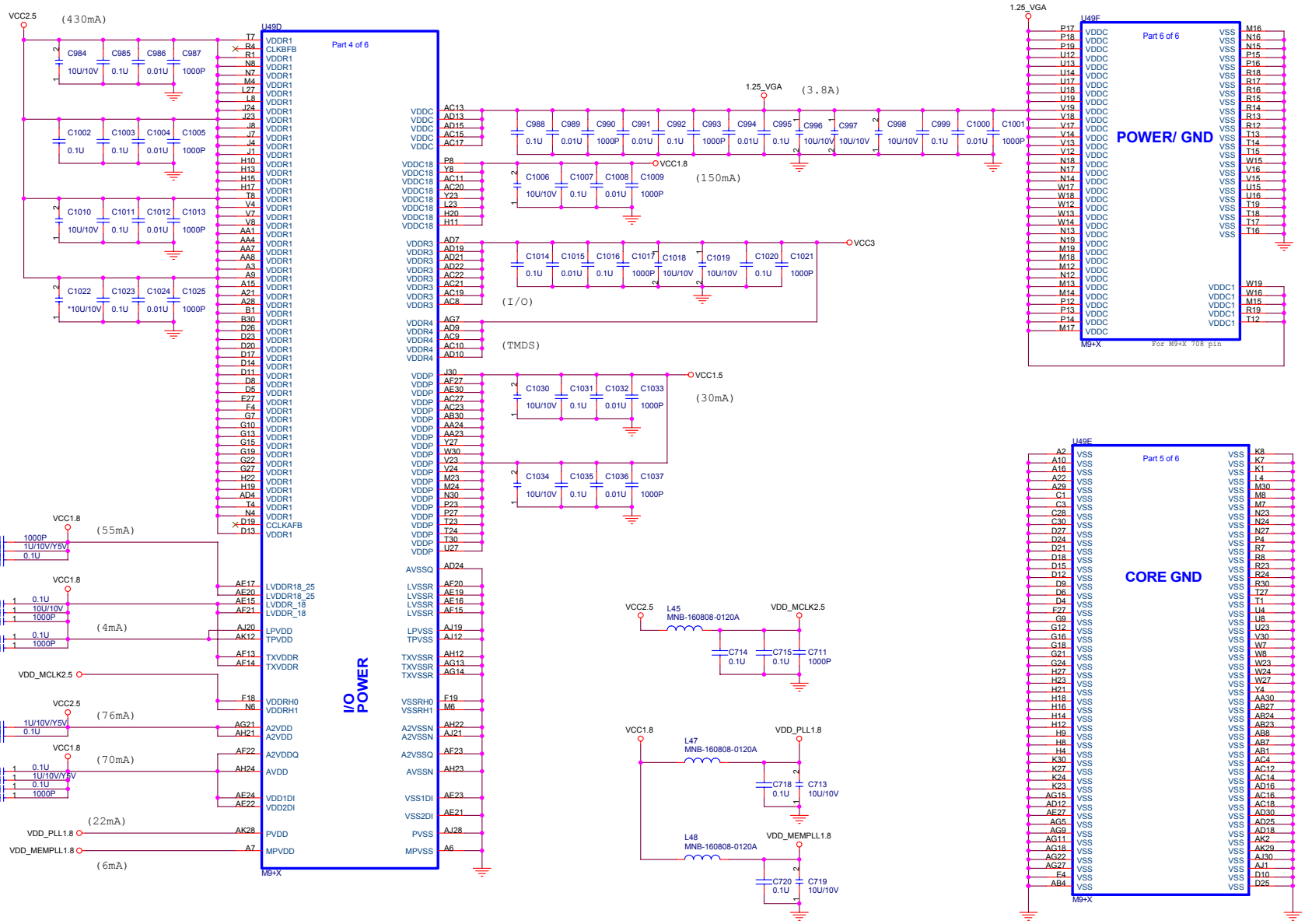
POWERPLAY HIGH = "ON" AND 1.25V VDDC

POWERPLAY LOW = "OFF" AND 1.5V VDDC

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: ATI M9+X		
Size: Custom	Document Number: JE2.1 Main Board	Rev: 1A
Date: Monday, August 11, 2003	Sheet 17 of 38	



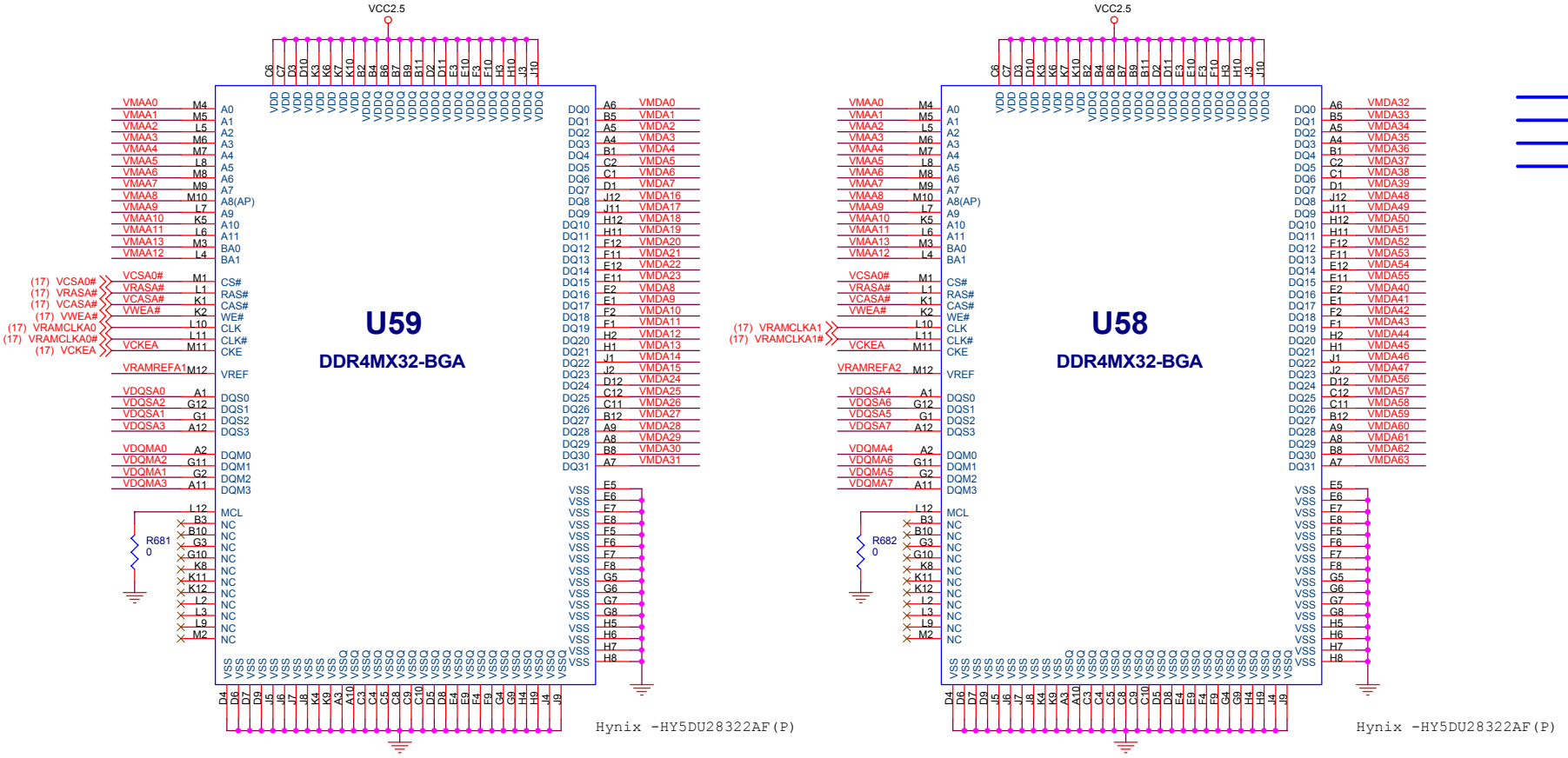
THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

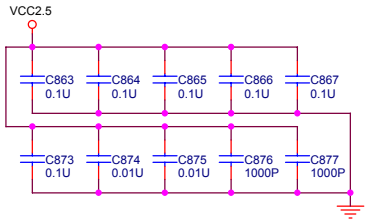
QUANTA COMPUTER

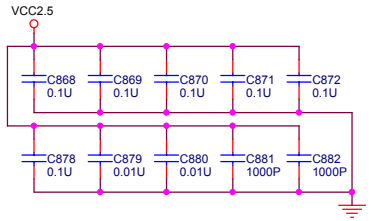
Title: ATI M9+X

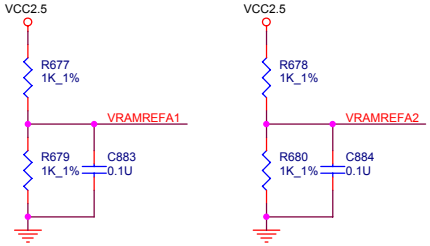
Size: Custom | Document Number: JE2.1 Main Board | Rev: 1A

Date: Monday, August 11, 2003 | Sheet 18 of 38





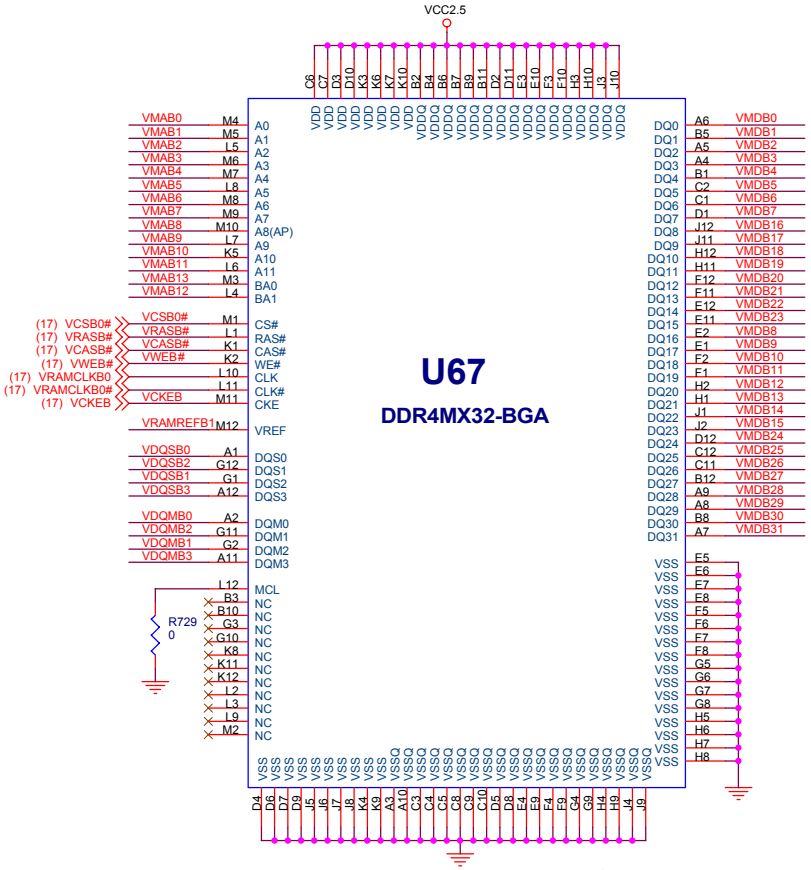


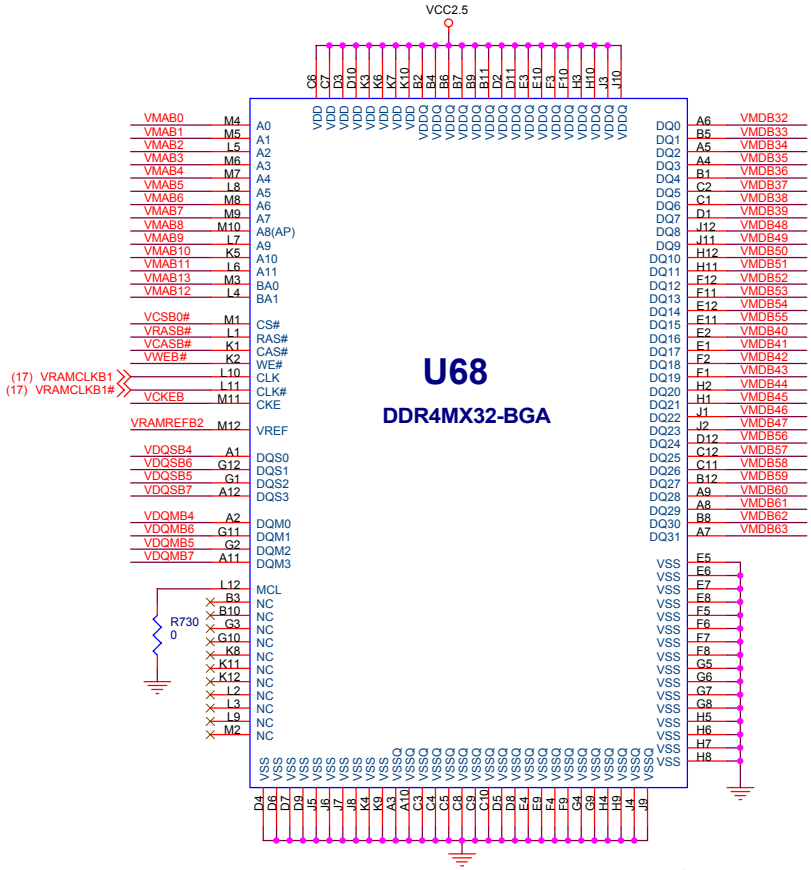


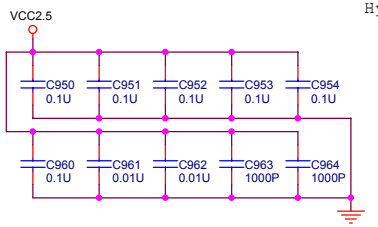
THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1

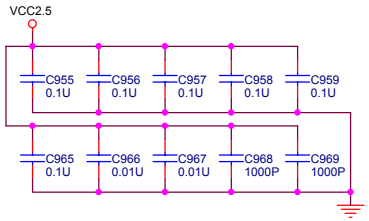
QUANTA COMPUTER

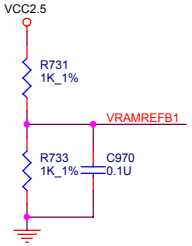
Title	VGA DDR VRAMx2 1/2	
Size: Custom	Document Number: JE2.1 Main Board	Rev: 1A
Date: Monday, August 11, 2003	Sheet 19 of 38	

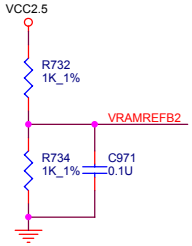












THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1

QUANTA COMPUTER

Title: VGA DDR VRAMx2 2/2

Size: Custom | Document Number: JE2.1 Main Board | Rev: 1A

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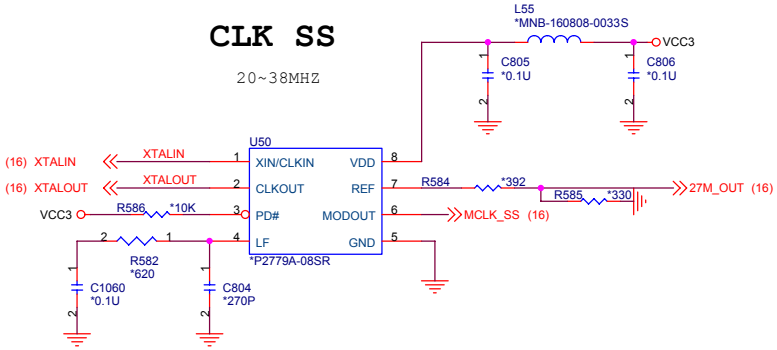
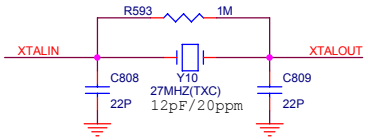
MCLK (230MHZ) SPREAD SPECTRUM LOGIC

CLK SS

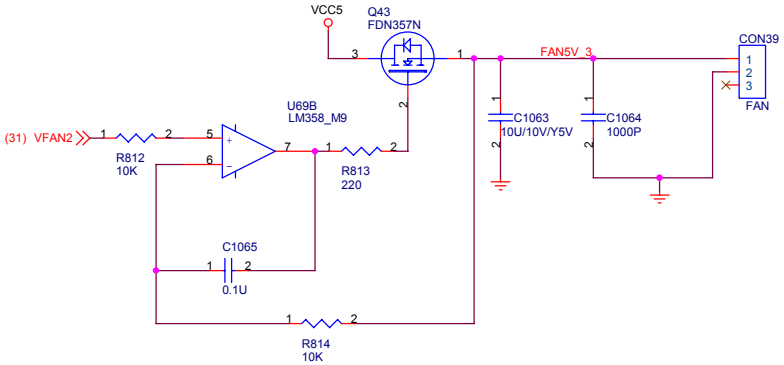
20~38MHZ

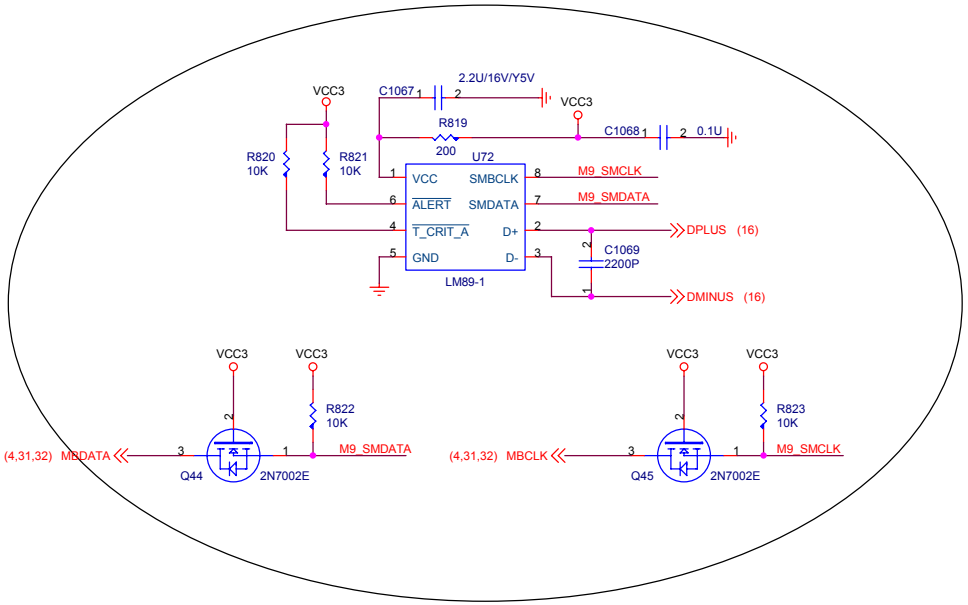




close to M9

FAN3 UNIT

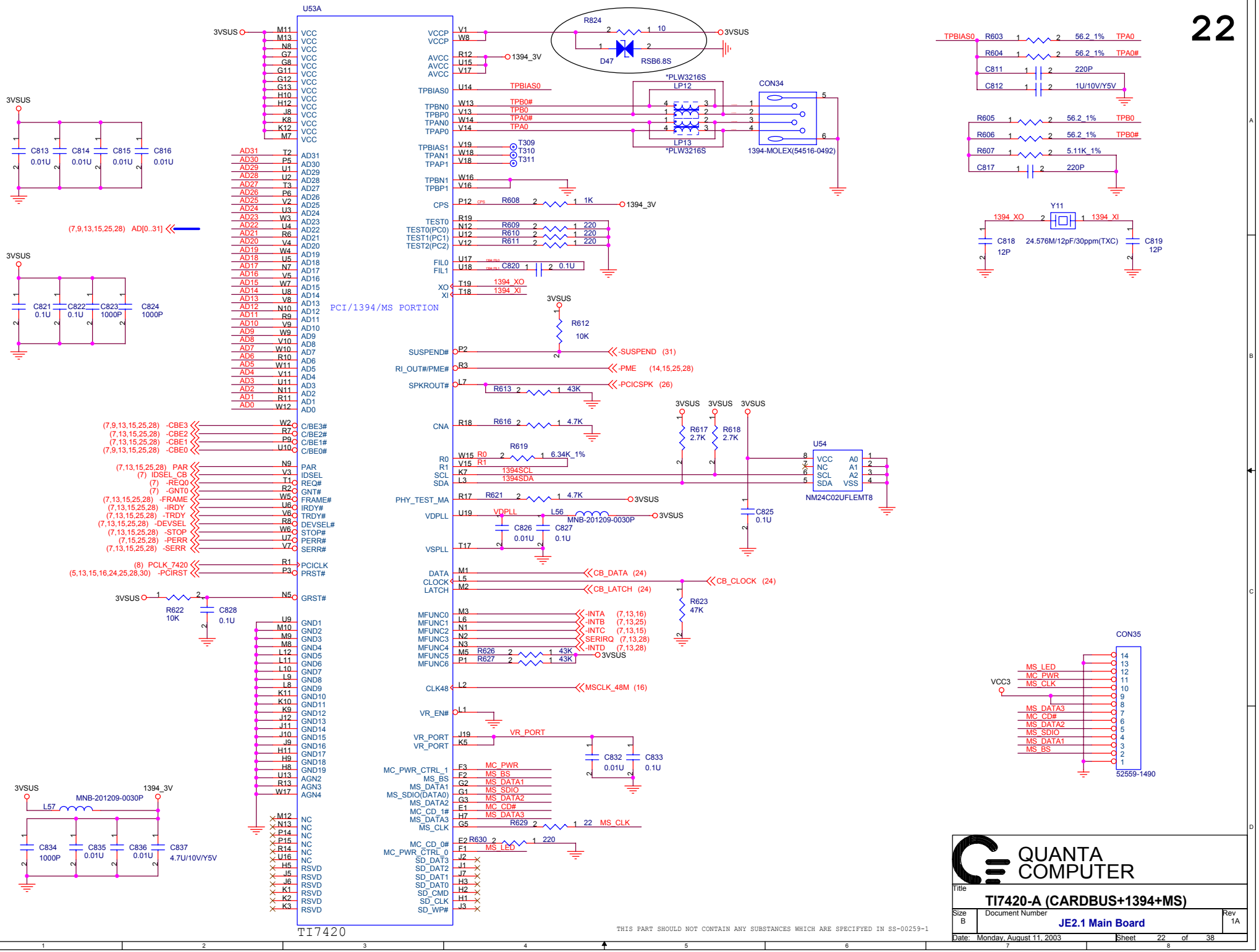




THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: AGP SSC / FAN3		
Size: Custom	Document Number: JE2.1 Main Board	Rev: 1A
Date: Monday, August 11, 2003	Sheet 21 of 38	

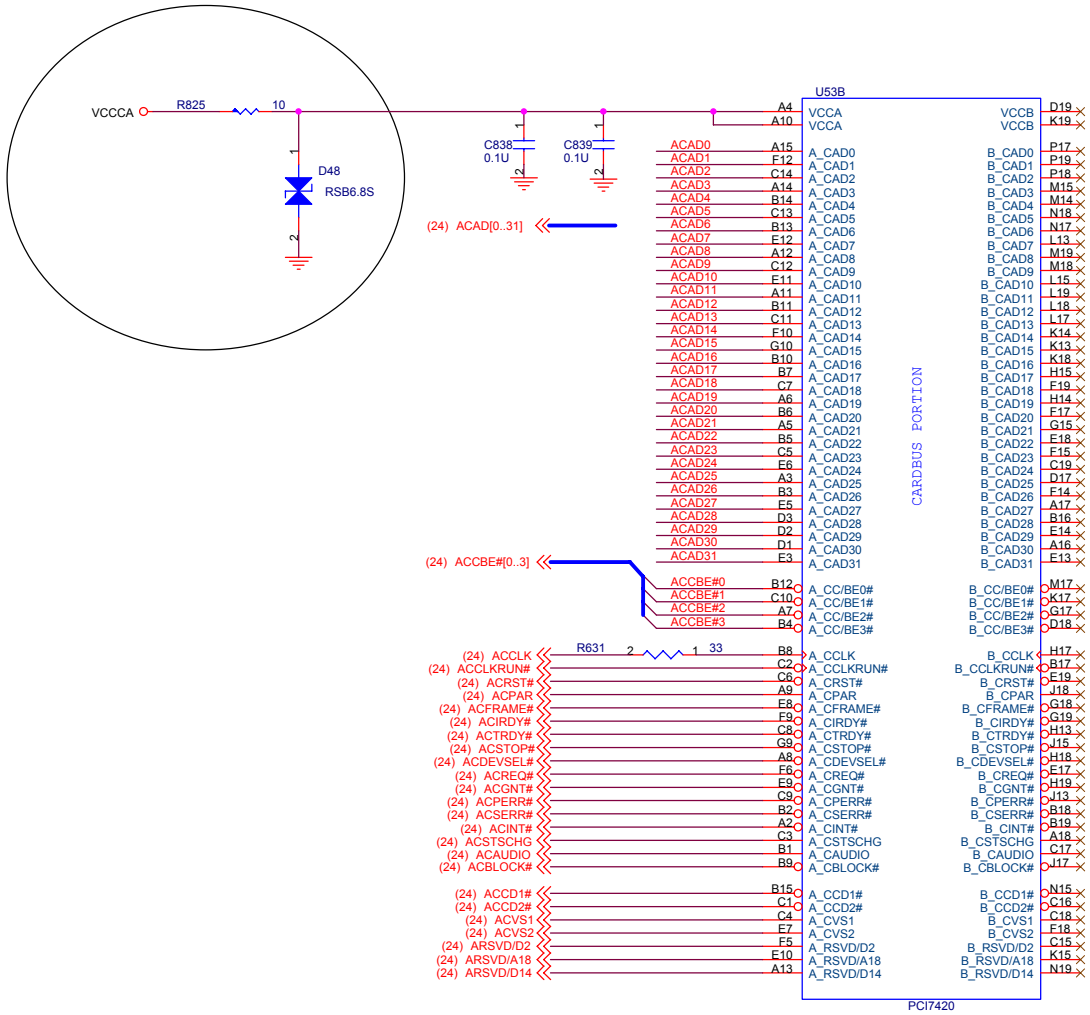


QUANTA COMPUTER

Title: TI7420-A (CARDBUS+1394+MS)

Size: B | Document Number: JE2.1 Main Board | Rev: 1A

Date: Monday, August 11, 2003 | Sheet 22 of 38



THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1

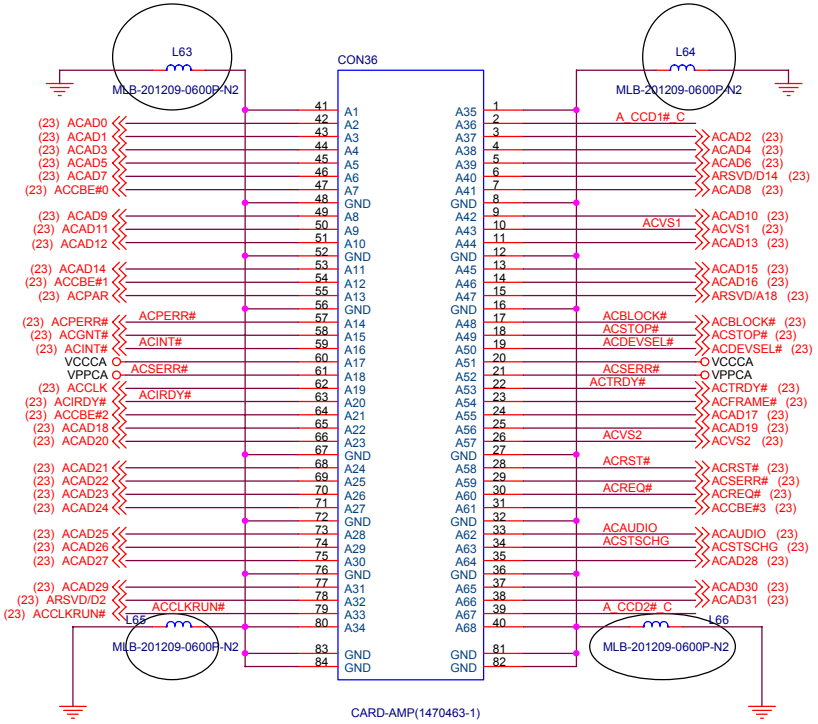
QUANTA COMPUTER

Title: TI7420-A (CARDBUS+1394+MS)

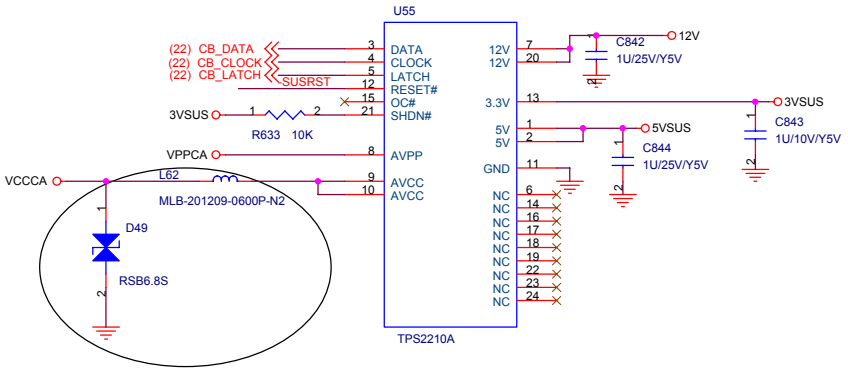
Size: Custom | Document Number: JE2.1 Main Board | Rev: 1A

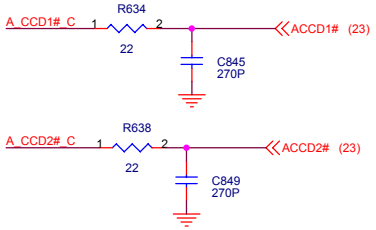
Date: Monday, August 11, 2003 | Sheet 23 of 38

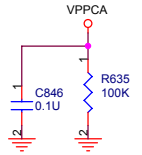
(23) ACAD[0..31]
(23) ACCBE#[0..3]

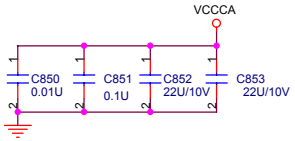


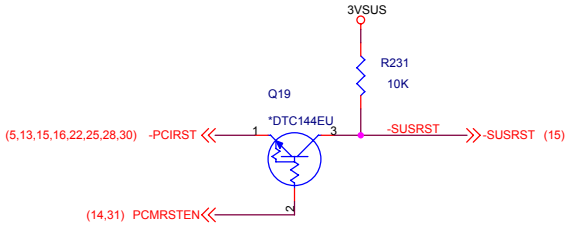
CardBus power switch chip











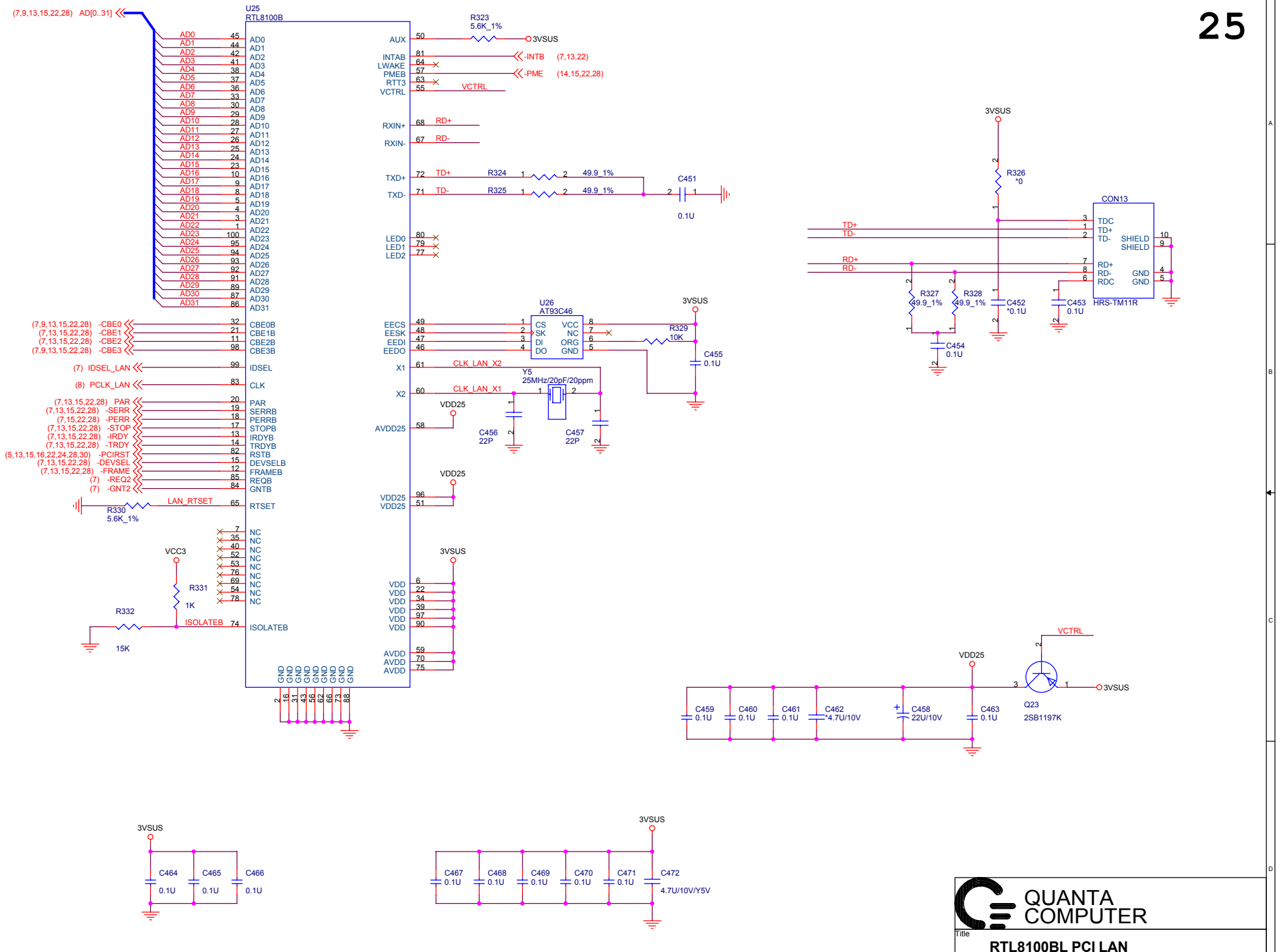
THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1

QUANTA COMPUTER

Title: CARDBUS SLOT

Size: B | Document Number: JE2.1 Main Board | Rev: 1A

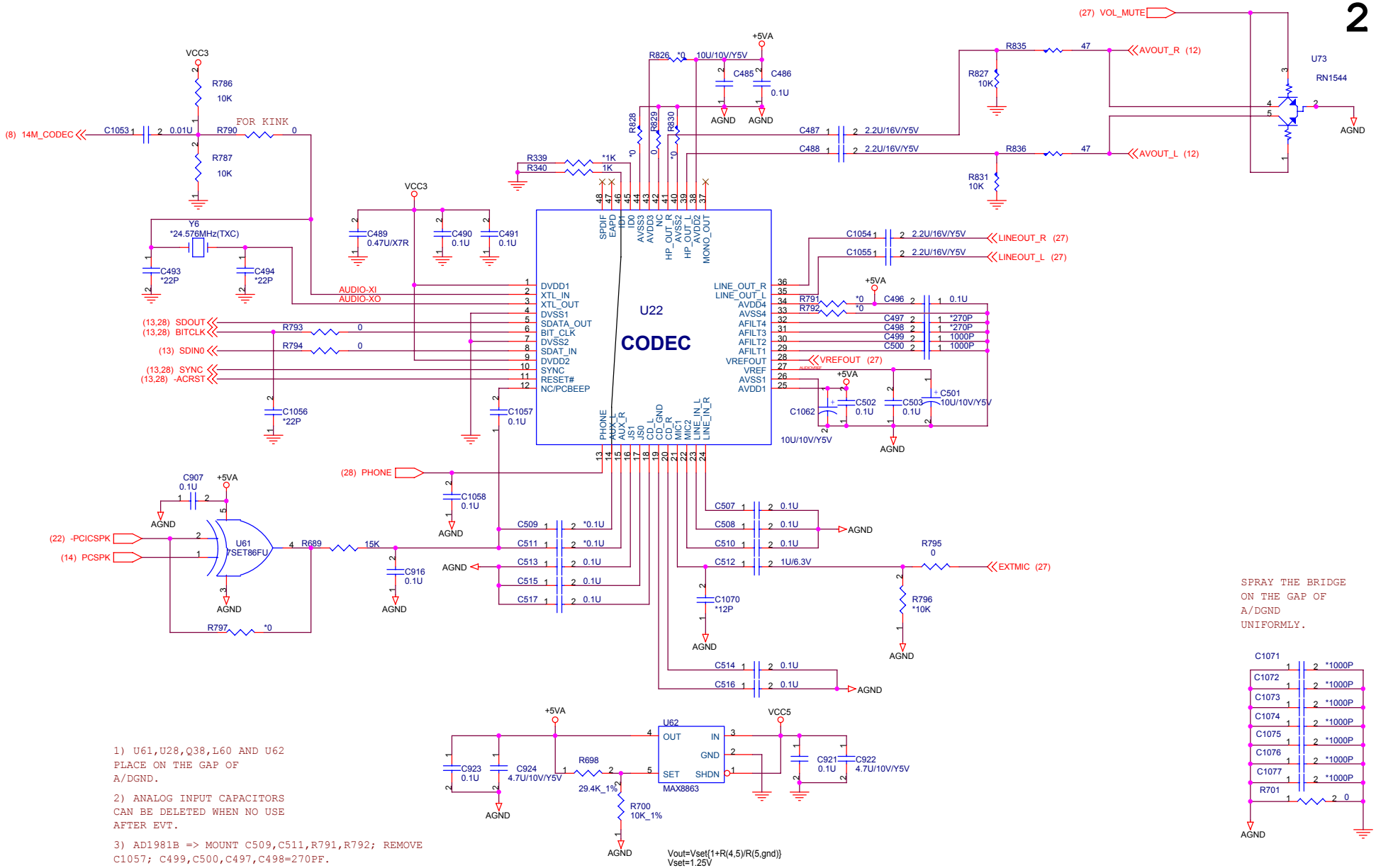
Date: Monday, August 11, 2003 | Sheet 24 of 38



THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title	RTL8100BL PCI LAN	
Size B	Document Number JE2.1 Main Board	Rev 1A
Date: Monday, August 11, 2003	Sheet 25 of 38	



THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

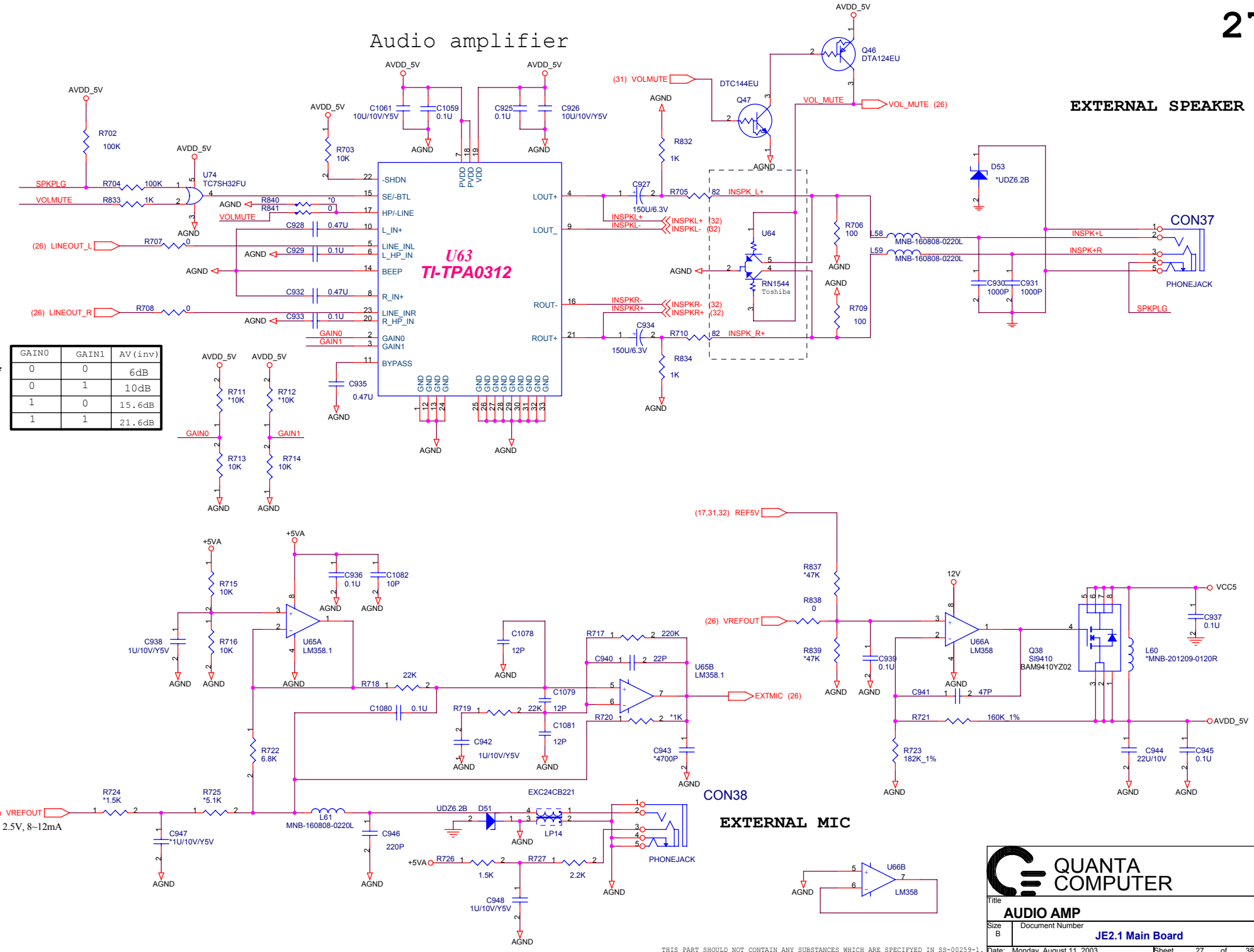
QUANTA COMPUTER

Title: **Audio ALC203**

Size: B | Document Number: **JE2.1 Main Board** | Rev: 1A

Date: Monday, August 11, 2003 | Sheet 26 of 38

Audio amplifier



GAIN0	GAIN1	AV(inv)
0	0	6dB
0	1	10dB
1	0	15.6dB
1	1	21.6dB

*

THIS PART SHOULD NOT CONTAIN ANY SUBSTANCES WHICH ARE SPECIFYED IN SS-00259-1.

QUANTA COMPUTER

Title: AUDIO AMP

Size: B | Document Number: JE2.1 Main Board | Rev: 1A

Date: Monday, August 11, 2003 | Sheet 27 of 38

MINIPCI-AMP(440073-124)

CON14

D19 1SS355

(31,32) -WLSW

(8) PCLK_MP

(7) -REQ3

(7,9,13,15,22,25) AD31
(7,9,13,15,22,25) AD29
(7,9,13,15,22,25) AD27
(7,9,13,15,22,25) AD25
(7,9,13,15,22,25) -CBE3
(7,13,15,22,25) AD23
(7,9,13,15,22,25) AD21
(7,13,15,22,25) AD19
(7,13,15,22,25) AD17
(7,13,15,22,25) -CBE2
(7,13,15,22,25) -IRDY
(7,14,15) -CLKRUN
(7,13,15,22,25) -SERR
(7,15,22,25) -PERR
(7,13,15,22,25) -CBE1
(7,9,13,15,22,25) AD14
(7,9,13,15,22,25) AD12
(7,13,15,22,25) AD10
(7,13,15,22,25) AD8
(7,9,13,15,22,25) AD7
(7,9,13,15,22,25) AD5
(7,9,13,15,22,25) AD3
(7,9,13,15,22,25) AD1

TIP LAN1 LAN3 LAN5 LAN7 LED_GP LED_GN NC1 -INTB +3V R(IRQ3) GND PCICLK GND -REQ +3V AD31 AD29 GND AD27 AD25 (V) -CBE3 AD23 GND AD21 AD19 GND AD17 -CBE2 -IRDY +3V -CLKRUN -SERR GND -PERR -CBE1 AD14 GND AD12 AD10 GND AD8 AD7 +3V AD5 (V) AD3 +5V AD1 GND SYNC SDIN0 BITCLK -AC_PRIMARY BEEP AGND +MIC -MIC AGND -RI +5VA

RING LAN2 LAN4 LAN6 LAN8 LED_YP LED_YN NC2 +5V -INTA R(IRQ4) +3VAUX -RST +3V -GNT GND -PME (V) AD30 +3V AD28 AD26 AD24 IDSEL GND AD22 AD20 PAR AD18 AD16 GND -FRAME -TRDY -STOP +3V -DEVSEL GND AD15 AD13 AD11 GND AD9 -CBE0 +3V AD6 AD4 AD2 AD0 (V) SERIRQ GND M66EN SDOUT SDIN1 -RESET -MPCICACK AGND +SPK -SPK AGND NC4 +3VAUX

VCC5 -INTD (7,13,22)
3VSUS -PCIRST (5,13,15,16,22,24,25,30)
-GNT3 (7)
-PME (14,15,22,25)
AD30 (7,9,13,15,22,25)
AD28 (7,9,13,15,22,25)
AD26 (7,9,13,15,22,25)
AD24 (7,9,13,15,22,25)
IDSEL_MP (7)
AD22 (7,9,13,15,22,25)
AD20 (7,9,13,15,22,25)
PAR (7,13,15,22,25)
AD18 (7,13,15,22,25)
AD16 (7,13,15,22,25)
-FRAME (7,13,15,22,25)
-TRDY (7,13,15,22,25)
-STOP (7,13,15,22,25)
-DEVSEL (7,13,15,22,25)
AD15 (7,13,15,22,25)
AD13 (7,13,15,22,25)
AD11 (7,13,15,22,25)
AD9 (7,13,15,22,25)
-CBE0 (7,9,13,15,22,25)
AD6 (7,9,13,15,22,25)
AD4 (7,9,13,15,22,25)
AD2 (7,9,13,15,22,25)
AD0 (7,9,13,15,22,25)
SERIRQ (7,13,22)

-WLSW
Q24 DTC144EU
-WLLED (32)

VCC5 3VSUS

GND GND 125 126

MDC (Hight 4.4mm)

CON15

3VSUS
(13,26) SDOUT
(13,26) -ACRST
R334 22

MONO_OUT/PC_BEEP GND AUXA_RIGHT AUXA_LEFT CD_GND CD_RIGHT CD_LEFT GND 3.3V_AUX GND 3.3V AC97 SDATA OUT AC97 RESET# GND AC97 MSTRCLK

AUDIO_PWRDN MONO_PHONE RESERVED RESERVED GND 5V RESERVED RESERVED RESERVED RESERVED RESERVED AC97_SYNC AC97_SDATA_IN1 AC97_SDATA_IN0 GND AC97_BITCLK

MODEMSPKR
VCC5
R333 0 3VSUS
SYNC (13,26)
SDIN1 (13)
BITCLK (13,26)
R335 *4.7K

MDC-AMP(3-179373)

+5VA
U27A *RN4904
R336 *15K
MODEMSPKR
C475 *0.1U
R337 *10K
U27B *RN4904
D20 *1SS387
R338 *1K
C477 *1000P
C476 *0.1U
PHONE (26)
AGND AGND

VCC5 C633 10U/10V/Y5V C473 0.1U
3VSUS C634 10U/6.3V C474 0.1U

CON17 FI-S-2P-HF-T
CON16 RJ11(54972-6241)
RING
TIP

VCC5 C478 0.1U
3VSUS C479 0.1U
VCC3 C480 0.1U C481 0.1U C482 0.1U C483 0.1U C484 0.1U C635 10U/6.3V

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QUANTA COMPUTER

Title: MiniPCI & MDC
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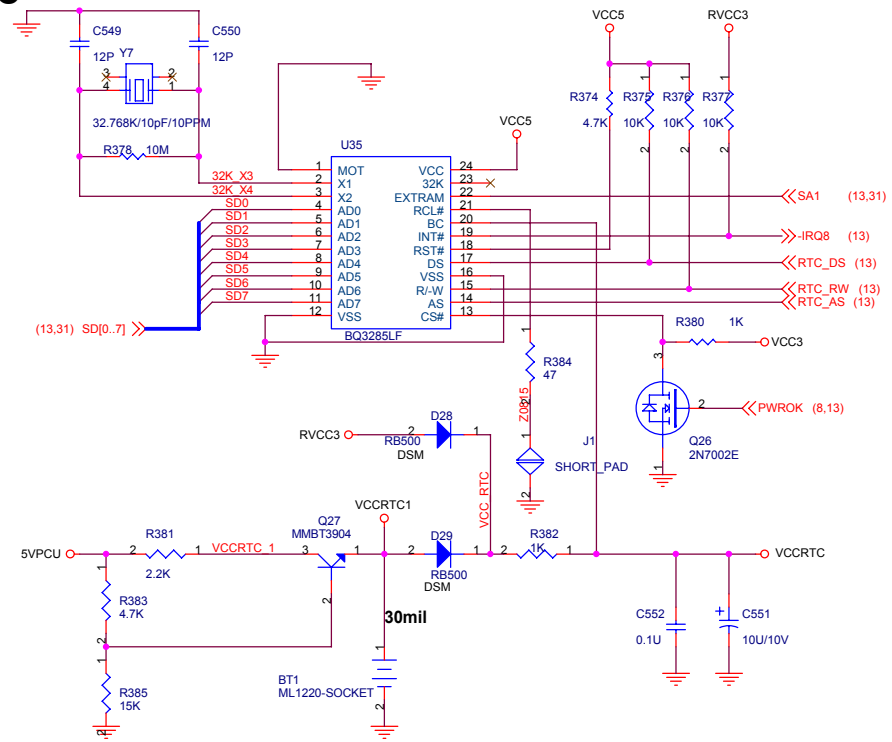
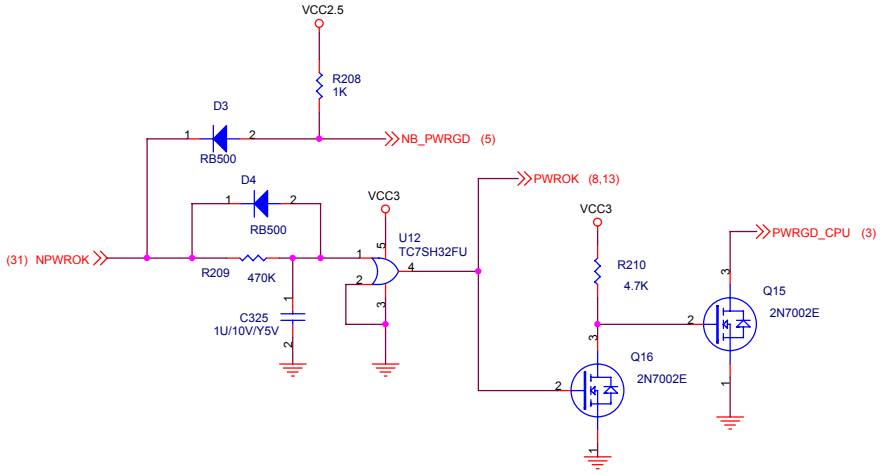
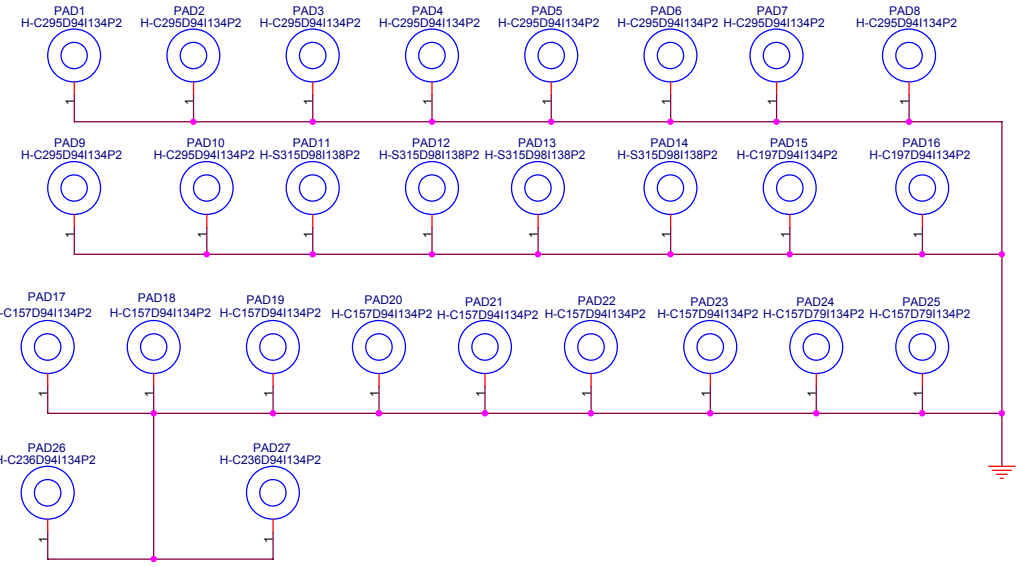
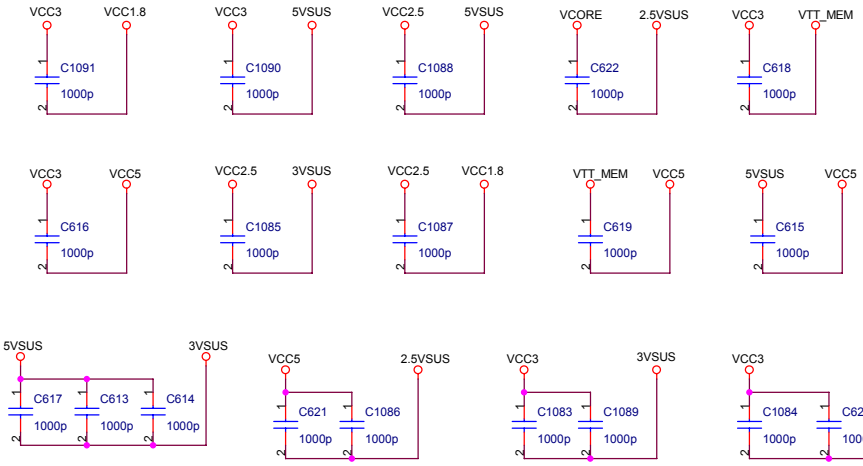
RTC









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QUANTA COMPUTER

Title: RTC/POWER GOOD LOGIC

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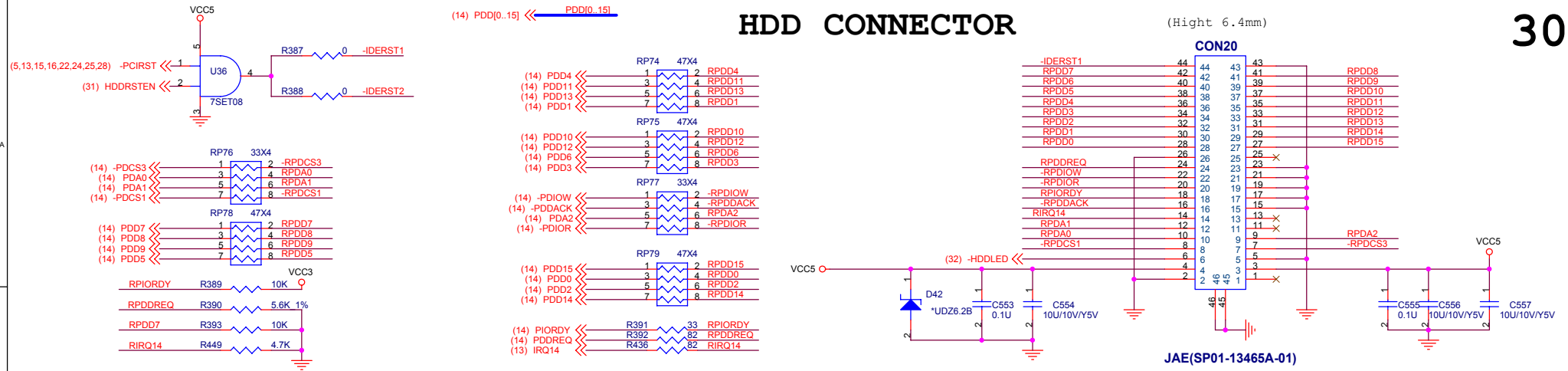
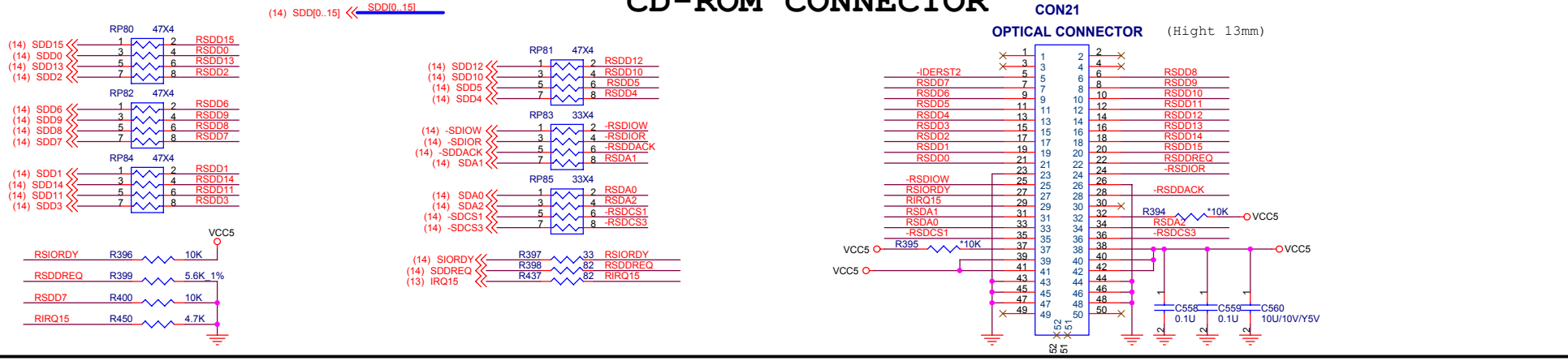
HDD CONNECTOR

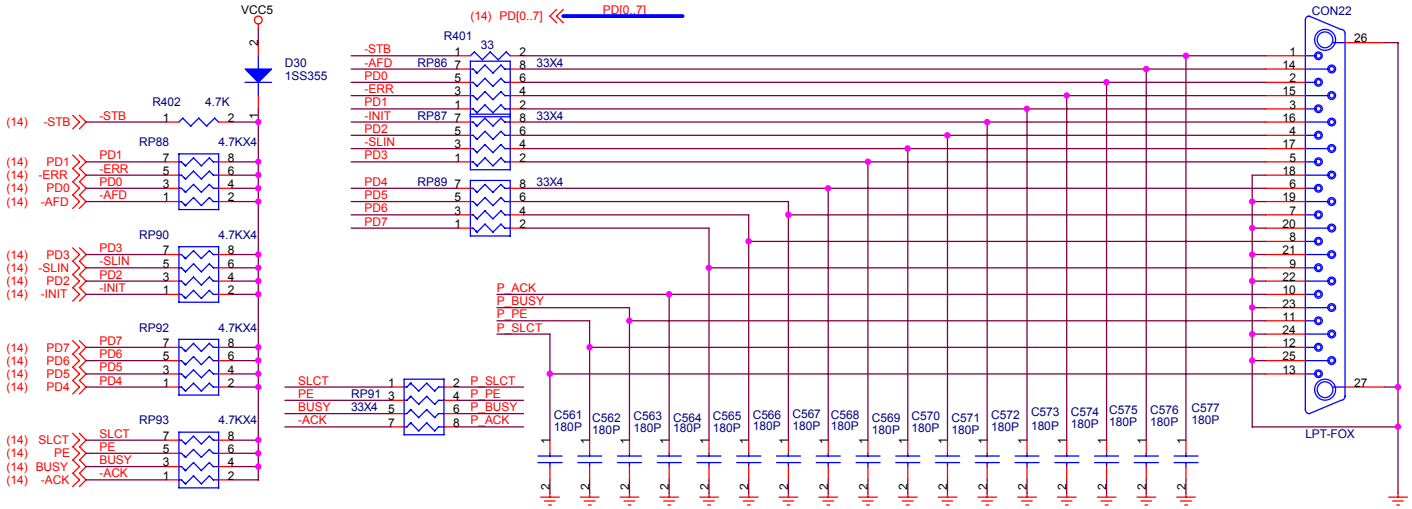
(Hight 6.4mm)



CD-ROM CONNECTOR



PRINTER port



QUANTA COMPUTER

Title: IDE/HDD/LPT Connector

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U37

PC87570 Ver:C4

Model ID

5VPCU
R406 0
PCU_ID

For debug only

KBDATA T269
KBCLK T270
MSDATA T271
MSCLK T272

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Title	PCU NS87570	
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Int. keyboard

MX[0..7] MX[0..7] (31)
MY[0..15] MY[0..15] (31)

CON23
MOLEX(52610-2490)

RP96 10KX4
RP99 10KX4

U40 DALC208SC6
U41 DALC208SC6

C588 0.1U
C589 0.1U
C590 0.1U

BIOS

BD[0..7] BD[0..7] (31)
BA[0..18] BA[0..18] (31)

U39 SST39SF040

POWER SWITCH BOARD CONNECTOR

CON24
MOLEX(52559-2290)

FAN1 UNIT

Q29 DTC144EU
Q30 FDN357N
U43B LM358_FAN
CON25 FAN

FAN2 UNIT

Q31 DTC144EU
Q32 FDN357N
U43A LM358_FAN
CON26 FAN

CHARGER BOARD CONNECTOR

PCN2
HEADER 30X2

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Title: INT. KEYBOARD/FAN
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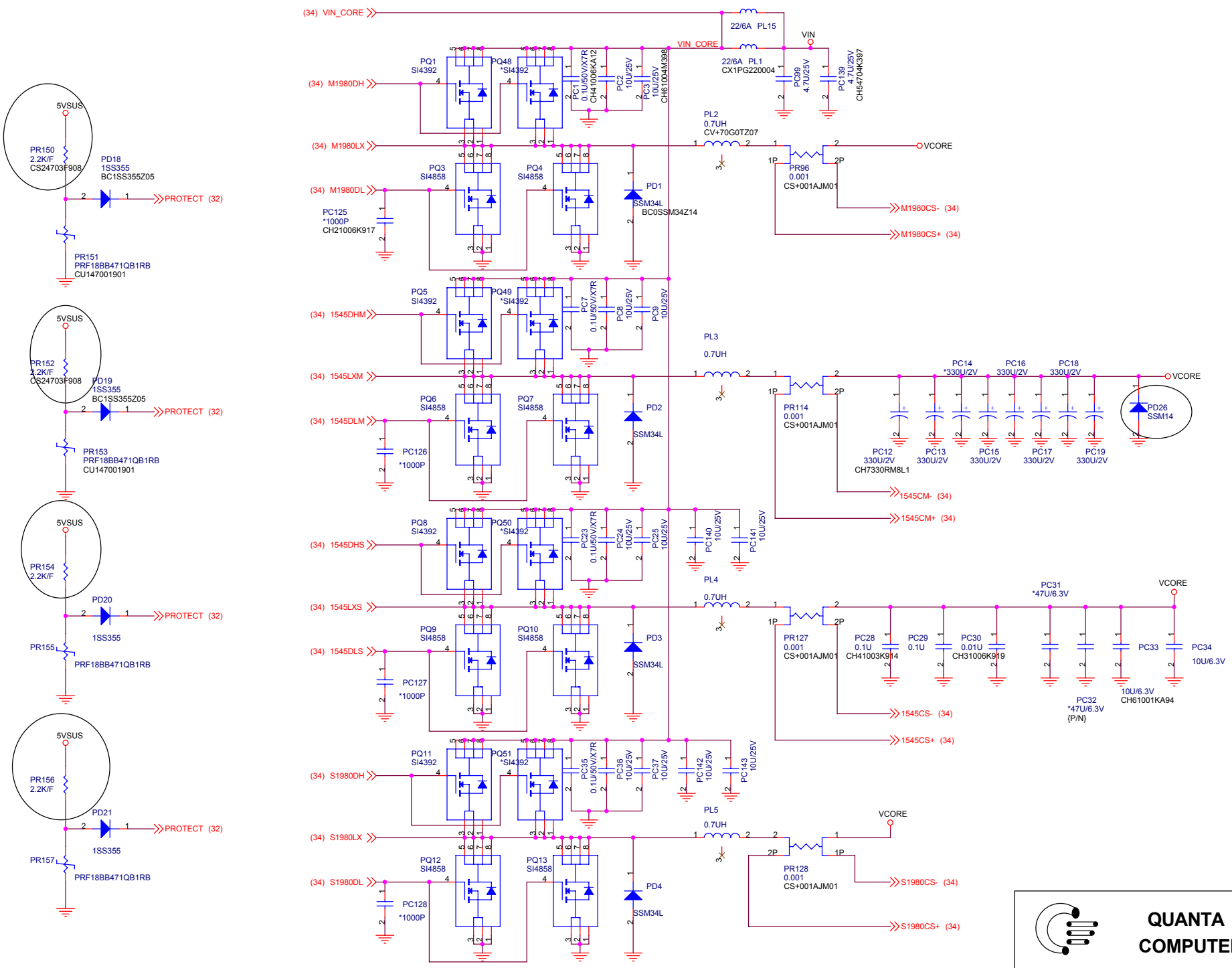

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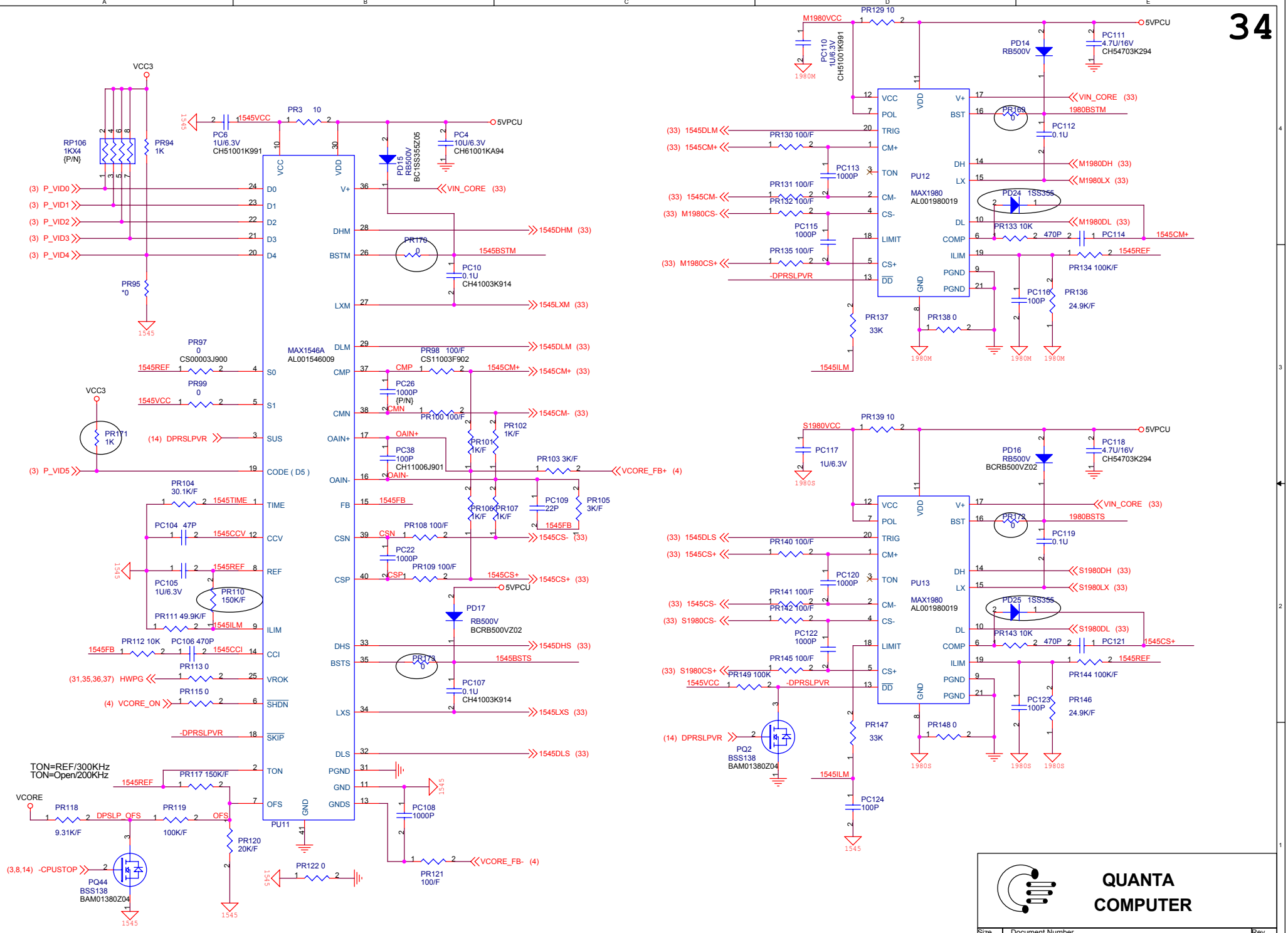

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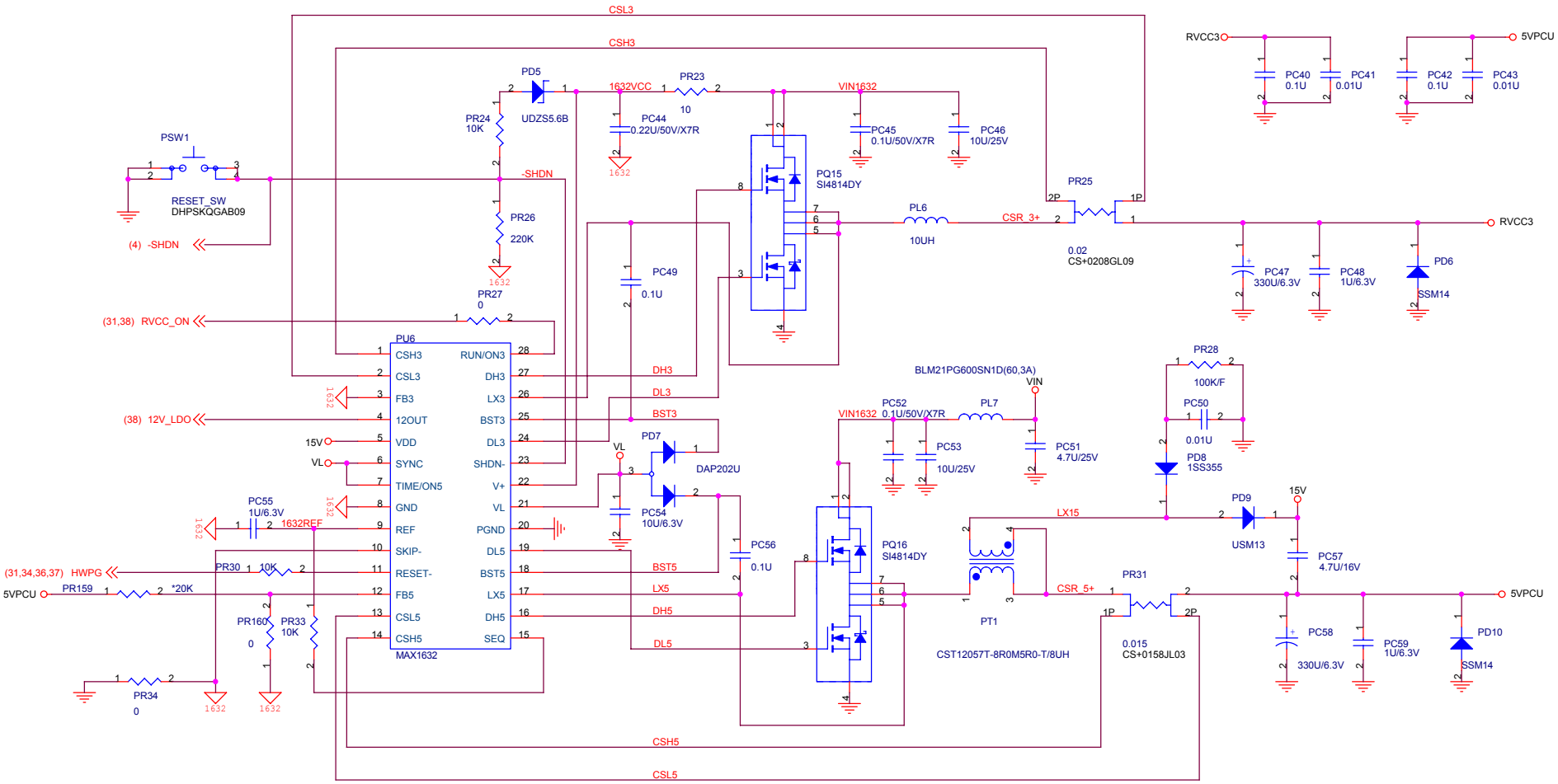

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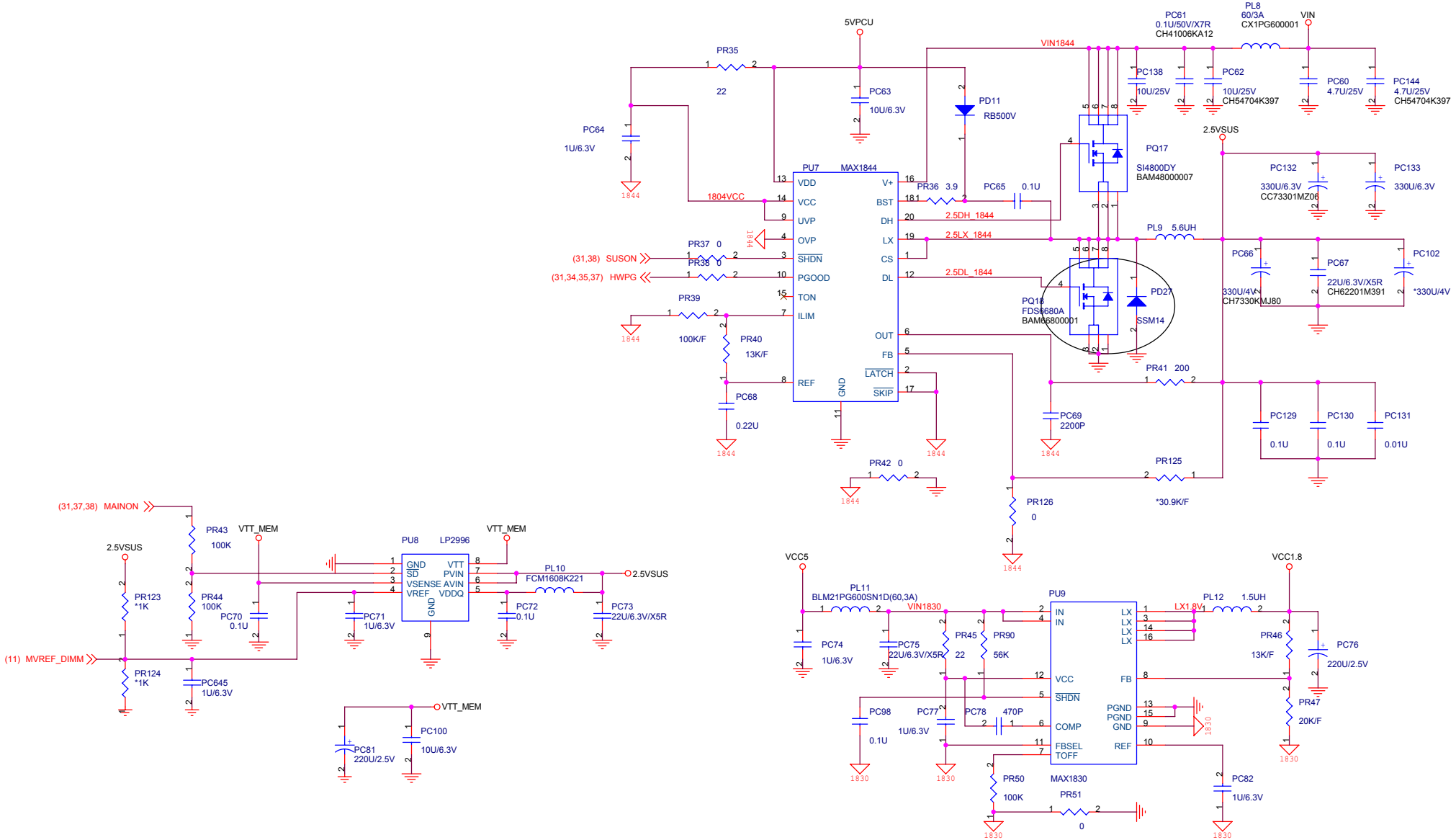

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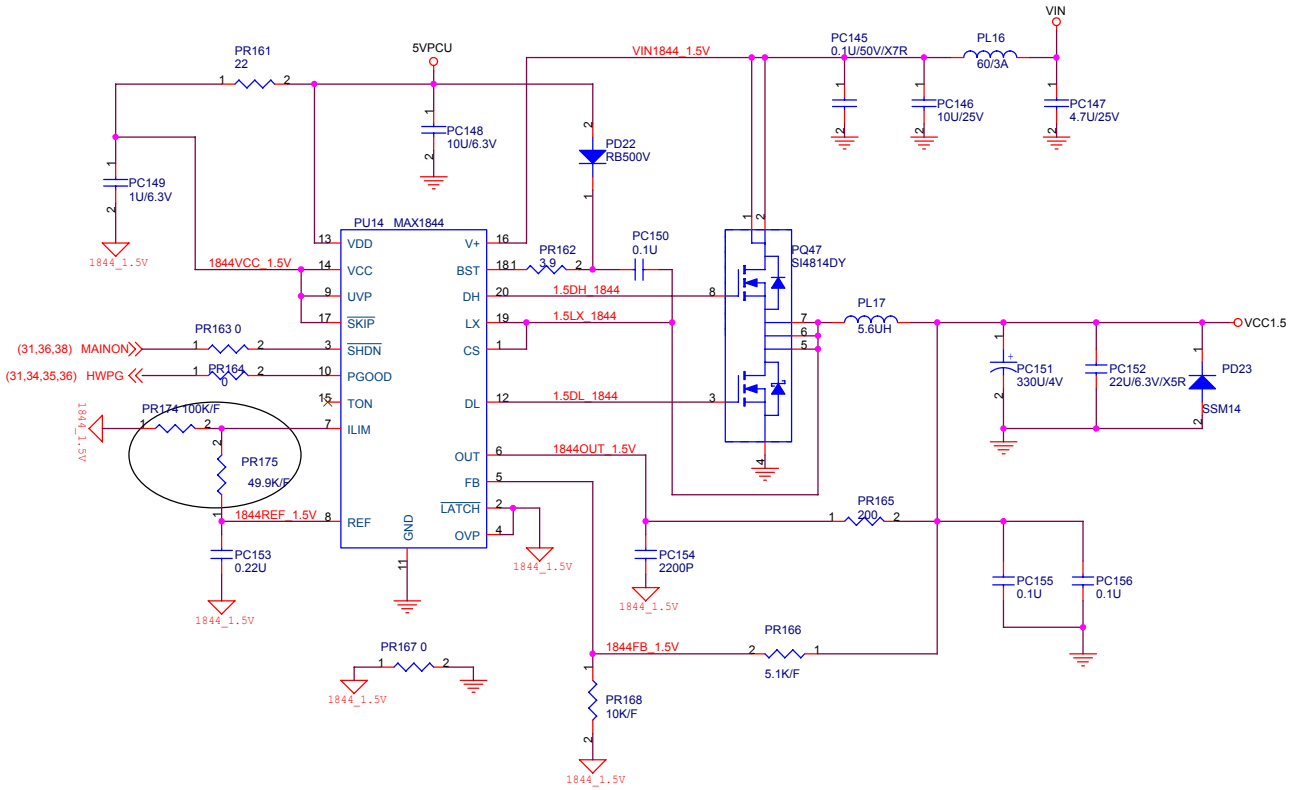

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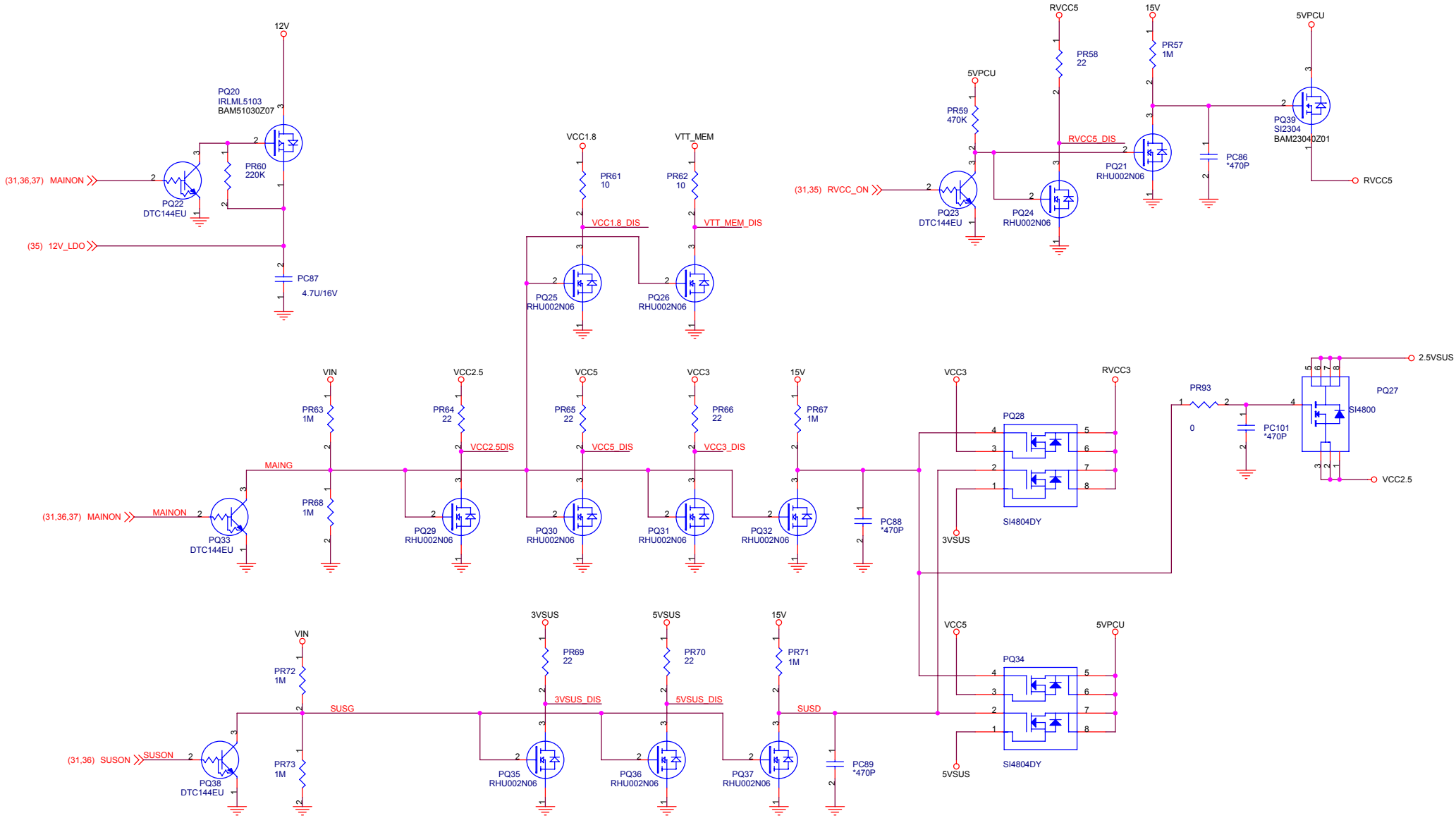

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